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AND

JOURNAL

OF THE

MINERALOGICAL SOCIETY

(Instituted February 3, 1876)

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MINERALOGICAL SOCIETY

(*Instituted February* 3, 1876)

BYE-LAWS[1]

1. The object of the Mineralogical Society of Great Britain and land, with which the Crystallological Society was amalgamated on cember 11, 1883, shall be to advance the knowledge of Mineralogy d also of Crystallography and Petrology.

2. The Society shall consist of Ordinary Members and Honorary mbers.

Ordinary Members

3. Every candidate for Ordinary Membership shall be proposed by o Ordinary Members, one, at least, of whom shall have personal owledge of the candidate.

4. Elections to Ordinary Membership shall be made by the Council, d shall be confirmed at the ensuing General Meeting by a majority nsisting of three-fourths of the Members present and voting.

5. Ordinary Members shall pay an entrance fee of one guinea and an nual subscription of one guinea. They shall be entitled to compound the annual subscription by a single payment of fifteen guineas, but mbers who have paid their annual subscriptions for twenty years shall entitled to compound for ten guineas.

6. Annual subscriptions shall be due on the first of January of each ar, but Members elected after the first of October shall not be required pay a subscription for the then current year.

7. No person elected an Ordinary Member of the Society shall be titled to any of the privileges of Membership until he shall have paid entrance fee and first annual subscription; and unless these be re-ved within four calendar months of the date of his election, or within ch further time as the Council may determine, the election of such rson shall be void.

8. At the first Meeting of the Council in each calendar year the name any Ordinary Member who is in default with his annual subscription the preceding year shall be brought before the Council, and an intima-

[1] Revised at the Anniversary Meeting of November 3, 1931, and further amended rch 7, 1940.

tion that this action has been taken shall be communicated to the Member in writing at his last known address. If at the first meeting in the next ensuing year the Member be still in default and the default be for the two preceding years, the Council shall be empowered to erase his name from the list of Members.

Honorary Members

9. Ten persons, non-resident in Great Britain or Ireland, may be elected Honorary Members. They shall pay neither entrance fee nor annual subscription. They shall not be entitled to vote on any question relating to the management or business of the Society, nor to serve on the Council of the Society, nor to fill any Office in the Society, but subject to these restrictions shall be entitled to every other privilege accorded to Ordinary Members.

10. Every candidate for Honorary Membership shall be proposed by two Members of the Council, and the election shall be by the Council, and shall be confirmed at the ensuing General Meeting by a majority consisting of three-fourths of the Members present and voting.

Council

11. The Society shall be governed by a Council consisting of a President, two Vice-Presidents, a General Secretary, a Foreign Secretary, a Treasurer, an Editor of the Journal, and twelve Ordinary Members, all of whom shall be elected annually, together with, as Life Members, all Members of the Society who have served the Office of President and, as ex-officio Members, the Managing Trustees of the Society.

12. The President, General Secretary, Treasurer, and Editor of the Journal shall be deemed the Officers of the Society.

13. A Managing Trustee shall not be precluded by reason of his appointment as such from being an Officer, Vice-President, or Foreign Secretary of the Society.

14. The Officers, Vice-Presidents, Foreign Secretary, and Ordinary Members of Council shall be elected annually at the Anniversary Meeting.

15. Four Ordinary Members of Council shall retire annually, and shall not be eligible for re-election until the next Anniversary Meeting.

16. The Council shall prepare each year a list of Members nominated for election as Officers, Vice-Presidents, Foreign Secretary, and Ordinary Members of Council for the next ensuing year.

17. The election of the Officers, Vice-Presidents, Foreign Secretary and Ordinary Members of Council shall be effected by the agency o

ting papers containing the list nominated by the Council. They shall sent by the General Secretary, at least four weeks before the Anniversary Meeting, to every Ordinary Member of the Society, and every h Member shall be entitled to substitute the names of any other dinary Members of the Society for those on the list.

18. The voting papers shall be returned by the Members to the General cretary, and shall be examined at the Anniversary Meeting by two rutineers appointed by the Chairman, who shall on their report declare e result of the election. The voting papers need not be signed.

19. The Council shall have power to appoint Officers, and to co-opt dinary Members of Council, to fill vacancies in the Council caused death or resignation during the interval between two Anniversary eetings.

20. Meetings of the Council shall be summoned by the General Secretary at the order of the President or of not fewer than three Members of e Council; at such meetings six shall be a quorum, of whom one shall either the President, a Vice-President, the Treasurer, or the General cretary.

21. A Report of Council on the work and progress of the Society shall submitted to each Anniversary Meeting.

Property and Trustees

22. Three or more Trustees shall be appointed by the Council. Of the rustees thus appointed not less than two shall be Managing Trustees lected from amongst the Members of the Society, and one a Custodian rustee. The Custodian Trustee shall be the Public Trustee or a Bank or her Corporate Body authorized by Law to act as Trustee and the inested Property of the Society shall stand in his or its name.

23. The Council may from time to time make such purchases of books other movable effects as they may consider to be required for the rtherance of the objects of the Society and the conduct of its business. ney may also dispose of such effects by sale, if not required, provided at no instruction to sell at any one time effects the total value of which ceeds the sum of fifty pounds shall be valid unless endorsed by a resolu- passed at a General Meeting of the Society.

24. The Council may authorize the investment of money and the sale investments. A copy of a resolution of the Council authorizing the le or purchase of investments, certified by the Chairman of the meeting which it was passed, shall be sufficient authority to the Managing stees to give effect to such resolution.

25. Composition fees shall be treated as Capital, and all moneys so received and all other moneys the investment of which has been authorized by the Council shall be invested in such stock or security as the Council may select from amongst the stocks and securities authorized by Law for the investment of trust moneys.

26. No Member of the Society is or shall be entitled to any distinct or separate share in the estate, revenue, or effects of the Society, and the Society shall not and may not make any dividend, gift, division, or bonus in money unto or between any of its Members, provided that nothing herein shall prevent the payment in good faith of reasonable and proper remuneration, or of an honorarium in lieu thereof, to any Member of the Society, in return for services rendered to the Society, nor prevent the distribution of copies of the publications of the Society gratis among the Members of the Society.

27. In the event of a dissolution of the Society its property and effects (whether funded or otherwise) shall be disposed of by gift to such other Societies or Institutions or in such other manner as may be decided by the vote of a majority of at least three-fourths of those present and voting at a General Meeting of the Society summoned with notice of the proposed disposal, provided that no individual Members shall benefit thereby, and that such gift or other disposal shall be for the benefit of Mineralogy or its allied Sciences.

Meetings

28. General Meetings of the Society shall be summoned from time to time as may be deemed necessary by the Council, or on the requisition of any ten Members of the Society. One of these meetings in each year shall be termed the Anniversary Meeting. Any meeting of the Society summoned for the purpose of considering special matters relating to the business of the Society shall be termed a Special General Meeting, and the summons thereto shall contain the resolutions or other matter to be considered, and shall be issued to the Members not less than four weeks before the date fixed for the Meeting.

Journal

29. The Numbers of the *Mineralogical Magazine and Journal of the Society* shall be issued at such intervals as the Council shall determine, and shall be sent, postage paid, to every Member of the Society, other than annual subscribers who are in default with their annual subscriptions for the preceding calendar year.

Auditors and Balance Sheet

30. One Member of the Council and one Ordinary Member of the ciety, who is not a Member of the Council, shall be appointed annually the Council to audit the accounts of the Society.

31. No auditor shall serve for more than three years in succession.

32. The audited Balance Sheet, after submission to the Council, shall published in the Journal of the Society as early as possible in every ar.

Expulsion of Members

33. A majority consisting of three-fourths of the whole Council shall ve power to expel a Member from the Society, but a Member who has en expelled shall have a right of appeal to the Society. Notice of such peal to the Society shall be sent by such Member to the General Secre- ry within four weeks of the expulsion, and the appeal shall be con- dered by the Society at the next Anniversary Meeting or at a Special eneral Meeting; a majority of the votes recorded at such Meeting fficing to confirm or annul the decision of the Council.

Alteration of the Bye-laws

34. The Bye-laws may be altered only at an Anniversary Meeting or a Special General Meeting duly summoned for the purpose of consider- g the proposed alterations, and only by a majority consisting of three- urths of the Members present and voting. Notice of changes proposed be made in the Bye-laws shall be communicated by the General Secre- ry to every Ordinary Member of the Society at least four weeks before e Anniversary Meeting or the Special General Meeting summoned for e purpose of their consideration.

Obligation Book

35. Ordinary Members, by payment of their entrance fee, signify heir acceptance of any Bye-laws approved by the Society; and every Member of the Society shall sign an Obligation Book.

Interpretation

36. In the interpretation of the Bye-laws words in the masculine ender only shall include the feminine gender also.

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LIST OF MEMBERS

(*March* 1, 1941)

HONORARY MEMBERS

ar of
ction.

34 Fersman, Aleksandr Evgenievich. Director of the *Lomonosov Institute, Academy of Sciences, Moscow, Russia.*

33 Goldschmidt, Victor Moritz. Professor of Mineralogy in the University of Oslo. *Geologisk Museum, Trondhjemsveien* 23, *Oslo, Norway.*

00 Lacroix, Antoine François Alfred. Emeritus Professor of Mineralogy in the Muséum National d'Histoire Naturelle. 61 *Rue de Buffon, Paris V, France.*

33 Niggli, Paul. Professor of Mineralogy in the Technical High School of Zürich. *Mineralogical Institute, Sonneggstrasse* 5, *Zürich* 6, *Switzerland.*

37 Palache, Charles. Emeritus Professor of Mineralogy in *Harvard University, Cambridge, Massachusetts, U.S.A.*

37 Walker, Thomas Leonard. Emeritus Professor of Mineralogy in the University of Toronto, and formerly Director of the Royal Ontario Museum of Mineralogy. *East* 20 *Avondale Road, Toronto, Canada*

ORDINARY MEMBERS[1]

A Annual Subscribers.
L Life-Members.
C Belonged to the Crystallological Society at the time of the amalgamation of the two Societies, December 11, 1883.

	Year of Election	
A	1931	Adams, Leason Herberling, B.S. *Geophysical Laboratory, 2801 Upton Street, Washington, D.C., U.S.A.*
A	1939	Agrell, Stuart Olof, B.A., F.G.S. *Dept. of Geology, The University, Manchester.*
A	1933	Alderman, Arthur Richard, Ph.D., M.Sc., F.G.S. *Dept. of Geology, The University, Adelaide, Australia.*
A	1931	Aminoff, Gregori, Professor. *Mineralogiska Avdelning Naturhistoriska Riksmuseet, Stockholm 50, Sweden.*
A	1928	Anderson, Basil William, B.Sc., F.C.S. *Ladylane, Lodge Hill, Ditchling, Sussex.*
L	1926	Andrew, Gerald, M.Sc., F.G.S. Geologist to the Sudan Government, *P.O. Box 244, Khartum, Anglo-Egyptian Sudan*; and 8 *Calland Avenue, Hyde, Cheshire.*
A	1939	Archambault, Maurice, Chief of the Division of Mineralogy and Chemistry, *Quebec Bureau of Mines, Parliament Buildings, Quebec City, Canada.*
A	1938	Ashby, Donald Frederick, A.R.C.S., B.Sc., F.G.S. *Dept. of Geology, The University, Bristol*, 8.
L	1900	Ashcroft, Frederick Noel, M.A., F.G.S., F.C.S., F.R.G.S. *c/o Mineral Dept., University Museum, Oxford.*
A	1936	Aspland, Vivien Lindsey, M.C., A.R.S.M., M.I.M.M. *'High Cross', West Chinnock, Crewkerne, Somerset.*
A	1935	Bailey, Edward Battersby, M.C., M.A., D.Sc., F.R.S. Director of the Geological Survey of Great Britain *Geological Survey and Museum, Exhibition Road, South Kensington, London, S.W. 7.*
A	1922	Balsillie, David, B.Sc., F.R.S.E., F.G.S. *Dept. of Geology Royal Scottish Museum, Edinburgh.*
A	1932	Bandy, Mark Chance, A.B., M.A., Ph.D., E.M. *c/o Patiño Mines & Enterprises, Llallagua, Bolivia.*

[1] Corrections for this List should be sent to the General Secretary.

Year of Election

1927 Bannister, Frederick Allan, M.A. *Mineral Dept., British Museum of Natural History, South Kensington, London, S.W.* 7; and 34 *Monahan Avenue, Purley, Surrey.*

1936 Barber, Cecil Thomas, M.Sc., Ph.D., D.Sc. *c/o D'Arcy Exploration Co. Ltd., Britannic House, Finsbury Circus, London, E.C.* 2.

1939 Barth, Thomas Fredrik Weybye, M.A., Ph.D. Professor, *Mineralogical Institute, The University, Oslo, Norway.*

1939 Beadnall, Hugh John Llewellyn, M.I.M.M., F.G.S., F.R.G.S. *B.M./Gems, London, W.C.* 1.

1928 Beard, Edward Harold, B.Sc. *Mineral Resources Dept., Imperial Institute, South Kensington, London, S.W.* 7.

1922 Belaiew, Nicholas Timothy, Colonel, C.B., M.I.M.E. 1 *Rond-Point Bugeaud, Paris XVI, France.*

1934 Benson, William Noel, B.A., D.Sc., F.G.S. Professor of Geology, *University of Otago, Dunedin, New Zealand.*

1933 Berman, Harry, Ph.D. Associate Professor of Mineralogy and Curator of the Museum, *Mineralogical Museum, Harvard University, Cambridge, Massachusetts, U.S.A.*

1929 Bernal, John Desmond, M.A., F.R.S. Professor of Physics, *Birkbeck College, Bream's Buildings, London, E.C.* 4.

1938 Berry, Leonard Gascoigne, M.A. 89 *Dewson Street, Toronto, Canada.*

1929 Blight, Percy. *Cowgreen Mine, Harwood, Barnard Castle, Co. Durham.*

1923 Blumenthal, Maurice. 558 *Quincy Street, Brooklyn, New York, U.S.A.*

1937 Blyth, Francis George Henry, M.Sc., B.Sc., A.C.G.I., D.I.C. *Dept. of Geology, Imperial College of Science and Technology, South Kensington, London, S.W.* 7.

1922 Boswell, Percy George Hamnall, O.B.E., D.Sc., A.R.C.S., F.R.S. Emeritus Professor of Geology, *Imperial College of Science and Technology, South Kensington, London, S.W.* 7.

1931 Bottley, Edward Percival. 30 *Old Church Street, Chelsea, London, S.W.* 3.

1927 Boubée, Nérée, Licencié-ès-Sciences. 3 *Place St. André-des-Arts, Paris VI, France.*

	Year of Election	
L	1927	Bowen, Norman Levi, M.A., B.Sc., Ph.D. Professor of Petrology, *University of Chicago, Chicago, Illinois, U.S.A.*
L	1897	Bowman, Herbert Lister, M.A., D.Sc., F.G.S., F.C.S. Professor of Mineralogy in the University of Oxford. *Dept. of Mineralogy, University Museum, Oxford.*
A	1923	Bragg, Sir William Henry, O.M., K.B.E., M.A., D.Sc., LL.D., F.R.S. Director of the Royal Institution. 21 *Albemarle Street, London, W.* 1.
A	1920	Bragg, Sir William Lawrence, Kt., O.B.E., M.A., D.Sc., F.R.S. Professor of Physics, *Cavendish Laboratory, Cambridge.*
A	1919	Brammall, Alfred, Ph.D., D.Sc., D.I.C., F.G.S., F.I.C., A.I.M.M. Assistant Professor in Petrology, *Dept. of Geology, Imperial College of Science and Technology, South Kensington, London, S.W.* 7.
A	1940	Bromehead, Cecil Edward Nowill, B.A., F.G.S. *Geological Survey and Museum, Exhibition Road, London, S.W.* 7.
A	1923	Buckley, Harold Eugene, D.Sc., F.C.S. Lecturer in Crystallography, University of Manchester. '*Bradda*', 100 *Hazelhurst Road, Worsley, near Manchester, Lancashire.*
A	1921	Bull, Alfred Joseph, M.Sc., Ph.D., F.Inst.P., F.G.S. *L.C.C. School of Photo-engraving,* 6 *Bolt Court, Fleet Street, London, E.C.* 4.
A	1926	Burri, Conrad Robert, Ph.D. Professor in the *Mineralogical Institute, Sonneggstrasse* 5, *Zürich* 6, *Switzerland.*
A	1919	Buttgenbach, Henri Jean François. Professor of Crystallography and Mineralogy in the University of Liége. 7 *Avenue Emile Digneffe, Liége, Belgium.*
A	1924	Campbell, Robert, M.A., D.Sc., F.R.S.E., F.G.S. Lecturer in Petrology, University of Edinburgh. '*Maryton*', *Woodhall Road, Colinton, Edinburgh.*
A	1937	Cassirer, Friedrich Wilhelm. 25 *Avenue de Lamballe, Paris XVI, France.*
A	1935	Claringbull, Gordon Frank, B.Sc., Ph.D., F.G.S. *Mineral Dept., British Museum of Natural History, South Kensington, London, S.W.* 7.
A	1928	Clarke, Edward de Courcy, M.A., A.I.M.M. *Dept. of Geology, University of Western Australia, Perth, Western Australia.*

Year of Election

1927 Clegg, Edward Leslie Gilbert, B.Sc. Superintending Geologist, *Geological Survey of India*, 27 *Chowringhee Road, Calcutta, India.*

1931 Cockburn, Alexander Murray, B.Sc., Ph.D., F.R.S.E. *Grant Institute of Geology, King's Buildings, West Mains Road, Edinburgh.*

1927 Coke, Basil Elmsley, Lieut.-Colonel R.E. (retired), O.B.E., M.A., F.G.S. *'Littlehill', Harpsden, Henley-on-Thames, Oxfordshire.*

1923 Combe, Arthur Delmar, F.G.S. *Geological Survey, Entebbe, Uganda, East Africa.*

1900 Coomaraswamy, Ananda K., D.Sc., F.L.S., F.G.S., M.R.A.S. Keeper of Indian Art, *Museum of Fine Arts, Boston, Massachusetts, U.S.A.*

1938 Coulson, Arthur Lennox, D.Sc., D.I.C., F.G.S. Superintending Geologist, *Geological Survey of India*, 27 *Chowringhee Road, Calcutta, India.*

1935 Courtauld, Mrs. Virginia. *Eltham Hall, London, S.E.* 9.

1924 Coussmaker, Arthur Blakeney, M.C., A.I.M.M. 78 *Hatton Garden, London, E.C.* 1.

1899 Cullis, Charles Gilbert, D.Sc., F.G.S., M.I.M.M. Emeritus Professor of Economic Mineralogy, *Imperial College of Science and Technology, South Kensington, London, S.W.* 7; and 81 *Murray Road, Wimbledon, London, S.W.* 19.

1935 Davidson, Charles Findlay, B.Sc., F.R.S.E., F.G.S. *Geological Survey and Museum, Exhibition Road, South Kensington, London, S.W.* 7.

1926 Davies, George MacDonald, M.Sc., F.G.S. Reader in Geology, Birkbeck College, London. 63 *Beechwood Road, Sanderstead, Surrey.*

1936 Davison, Ernest Henry, B.Sc., F.G.S. 11 *Mutley Road, Mannamead, Plymouth.*

1939 Deans, Thomas, B.A. *Mineral Resources Dept., Imperial Institute, South Kensington, London, S.W.* 7.

1898 De Castro, John Paul, M.A., F.C.S., F.I.C. 5 *Penton Avenue, Staines, Middlesex.*

	Year of Election	
A	1936	DEER, William Alexander, M.Sc., Ph.D. Research Fellow, St. John's College, Cambridge. 178 *Huntingdon Road, Cambridge.*
A	1937	DIXEY, Frank, O.B.E., D.Sc., F.G.S. Director of the Geological Survey of Nyasaland, *Zomba, Nyasaland, British Central Africa.*
A	1933	DOLLAR, Archibald Thomas John, B.Sc., Ph.D., F.R.S.E., F.G.S. *Dept. of Geology, The University, Glasgow.*
A	1940	DONNAY, Joseph Désiré Hubert, E.M., Ph.D. Professor of Crystallography and Mineralogy, *Université Laval, Quebec, Canada.*
A	1925	DOUBLE, Ivan Sidney, M.Sc., F.G.S. *Dept. of Geology, The University, Liverpool*, 3.
L	1928	DOUGLAS, George Vibert, M.C., M.Sc., F.G.S. Professor of Geology, *Dalhousie University, Halifax, Nova Scotia.*
A	1937	DREVER, Harold Irving, B.Sc. *Dept. of Geology, The University, St. Andrews, Fife;* and 13 *Wardie Road, Edinburgh.*
L	1910	DRUGMAN, Julien Léon Eugène, Ph.D., M.Sc. 33 *Rue Edmond Picard, Uccle, Brabant, Belgium.*
A	1938	DUNHAM, Kingsley Charles, B.Sc., Ph.D., S.D., F.G.S. *Geological Survey and Museum, Exhibition Road, South Kensington, London, S.W.* 7.
L	1936	DUNN, John Alexander, D.Sc., D.I.C., F.G.S. Superintending Geologist, *Geological Survey of India*, 27 *Chowringhee Road Calcutta, India.*
A	1938	DUNSTALL, William James, A.R.C.S. 6 *The Crescent, Bedford*
A	1937	EASTWOOD, Tom, A.R.C.S., F.G.S. Assistant to the Director *Geological Survey and Museum, Exhibition Road, South Kensington, London, S.W.* 7.
L	1926	ECKERMANN, Harry von, Ph.D. Lecturer in Mineralogy and Petrology, University of Stockholm. *Edeby pr. Sparrehólm, Sweden.*
L	1918	EDGE, Arthur Broughton, M.B.E., A.R.S.M., A.R.C.S., B.Sc. F.G.S., F.C.S. *c/o Dept. of Geology, Imperial College of Science and Technology, South Kensington, London, S.W.* 7
A	1925	ELLSWORTH, Hardy Vincent, M.A., Ph.D. *Geological Survey of Canada, Ottawa, Canada.*

Year of Election

1939 Evans, Robert Crispin, Ph.D., M.A., B.Sc. 8 *Fitzwilliam Street, Cambridge.*

1926 Fearnsides, William George, M.A., F.R.S. Professor of Geology, University of Sheffield. 11 *Ranmoor Crescent, Sheffield.*

1915 Fermor, Sir Lewis Leigh, Kt., O.B.E., A.R.S.M., D.Sc., F.R.S. *c/o Lloyds Bank*, 6 *Pall Mall, London, S.W.* 1; and 24 *Durdham Park, Bristol.*

1935 Fleet, William Frederick, M.Sc., Ph.D., F.G.S. *Chelsea Polytechnic, London, S.W.* 3; and '*Branscombe*', *Briton Hill Road, Sanderstead, Surrey.*

1895 Fletcher, Rev. Mark, M.A., M.Sc., F.G.S. Formerly Lecturer in Mineralogy in King's College, University of Durham, Newcastle-on-Tyne. *Long Benton Vicarage, Forest Hall, Northumberland.*

1902 Flett, Sir John Smith, K.B.E., M.A., LL.D., D.Sc., F.R.S. *c/o Geological Survey and Museum, Exhibition Road, South Kensington, London, S.W.* 7.

1926 Ford, Hugh Alexander, H.B.M. Consul-General, *The British Consulate General, Boston, Massachusetts, U.S.A.*

1940 Friend, John Alfred Newton, D.Sc., Ph.D., F.I.C. *Central Technical College, Suffolk Street, Birmingham*, 1.

1937 Game, Philip Malcolm, B.Sc., F.R.G.S. *Mineral Dept., British Museum of Natural History, South Kensington, London, S.W.* 7.

1923 Garnett, Cecil Stevenson, F.C.S., F.G.S. 6 *The Strand, Derby.*

1905 Goodchild, Wilbert, M.B., Ch.B. *Blencathra Sanatorium, Threlkeld, Penrith, Cumberland.*

1922 Gordon, Hugh Septimus, M.I.M.M. *Vermaaks Mines Syndicate, Francistown, Bechuanaland Protectorate, South Africa.*

1923 Gordon, Samuel George. *Academy of Natural Sciences, Logan Square, Philadelphia, Pennsylvania, U.S.A.*

1923 Gordon, William Thomas, M.A., D.Sc., F.R.S.E., F.G.S. Professor of Geology, *King's College, Strand, London, W.C.* 2.

	Year of Election	
L	1903	Grabham, George Walter, O.B.E., M.A., F.G.S. Formerly Geologist to the Sudan Government. *P.O. Box* 178, *Khartum, Anglo-Egyptian Sudan;* and *English Rooms, Funchal, Madeira (via Lisbon).*
L	1913	Graham, Richard Percival Devereux, B.A., D.Sc., F.R.S.C. Assistant Professor of Mineralogy, *McGill University, Montreal, Canada.*
A	1924	Grantham, Donald Robert, Ph.D., A.R.S.M., F.G.S. *Geological Survey, Lands and Mines Dept., Dodoma, Tanganyika Territory, East Africa;* and *'Carrickfergus', Deepdene Avenue, Dorking, Surrey.*
A	1929	Gray, George Wynter, A.R.S.M. 3 *Lombard Street, London, E.C.* 3.
A	1938	Griffiths, John Cedric, B.Sc., M.Sc., Ph.D., F.G.S. *Geological Laboratory, Trinidad Leaseholds, Ltd., Pointe-à-Pierre, Trinidad, West Indies.*
A	1931	Groves, Arthur William, D.Sc., Ph.D., M.Sc., D.I.C., F.G.S. *Mineral Resources Dept., Imperial Institute, South Kensington, London, S.W.* 7.
A	1930	Hall, Thomas Clifford Fitzwilliam, M.I.M.M. *c/o Serviços de Minas e Geologia, P.O. Box* 217, *Lourenço Marques, Portuguese East Africa;* and *'Trevu', Camborne, Cornwall.*
A	1912	Hallimond, Arthur Francis, M.A., Sc.D., F.G.S. Assistant Curator, *Geological Survey and Museum, Exhibition Road South Kensington, London, S.W.* 7.
L	1937	Harrison, John Vernon, D.Sc., F.R.S.E., F.G.S. Lecturer in Geology, *University Museum, Oxford.*
A	1931	Hart, Robert, B.Sc., Ph.D. *Macaulay Institute for Soil Research, Craigiebuckler, Aberdeen.*
L	1900	Hartley, Sir Harold Brewer, Kt., C.B.E., M.C., M.A., D.Sc., F.R.S. 14 *North Court, Wood Street, Westminster, London S.W.* 1.
A	1917	Harwood, Henry Francis, M.Sc., Ph.D., F.I.C., F.G.S. *'Erlesdene', Grannock Park, Degamwy, Llandudno Junction Caernarvonshire.*
A	1921	Hawkes, Leonard, D.Sc., F.G.S. Reader in Geology, University of London. *Bedford College, Regent's Park, London, N.W.* 1

Year of Election

1928 Heide, Fritz, D.Ph. *Schillerstrasse* 12, *Jena, Germany.*

1936 Henry, Norman Fordyce McKerron, B.Sc., M.A. *St. John's College, Cambridge.*

1929 Hey, Max Hutchinson, M.A., D.Sc., F.C.S. *Mineral Dept., British Museum of Natural History, South Kensington, London, S.W.* 7.

1927 Hitchen, Charles Stansfield, B.Sc., Ph.D., A.R.C.S., D.I.C., F.G.S. Government Geologist, *Dept. of Mining and Geology, P.O. Box* 339, *Nairobi, Kenya Colony.*

1928 Hodge, Matthew Burnop, M.Sc., Ph.D. *Bankfield Museum, Halifax, Yorkshire.*

1939 Holgate, Norman, M.Sc., F.G.S. *'Glas Eilean'*, 5 *Herkomer Avenue, Habergham Eaves, Burnley, Lancashire.*

1896 Holland, Sir Thomas Henry, K.C.S.I., K.C.I.E., A.R.C.S., D.Sc., LL.D., F.R.S. Principal of The University, Edinburgh. *Blackford Brae, Edinburgh.*

1929 Hollingworth, Sidney Ewart, M.A., D.Sc., F.G.S. *Geological Survey and Museum, Exhibition Road, South Kensington, London, S.W.* 7; and *'Whitecot', Addington Road, West Wickham, Kent.*

1914 Holmes, Arthur, D.Sc., D.I.C., A.R.C.S., F.G.S. Professor of Geology in the University of Durham. *Science Laboratories, South Road, Durham.*

1931 Honess, Arthur Pharaoh. Professor of Mineralogy, *Pennsylvania State College, State College, Pennsylvania, U.S.A.*

1925 Horn, Aubrey Evelyn. *Naraguta Tin Mines, Ltd., Post Office, Jos, Plateau Province, Northern Nigeria.*

1902 Howe, John Allen, O.B.E., B.Sc., F.G.S. 21 *Richmond Bridge Mansions, Twickenham, Middlesex.*

1928 Howling, Gerald Edward, B.Sc. *Mineral Resources Dept., Imperial Institute, South Kensington, London, S.W.* 7.

1935 Hugill, William, M.Met. *Langham House, Fields Road, Alsager, Stoke-on-Trent, Staffordshire.*

1939 Hurlbut, Cornelius S., Jr., M.A., Ph.D. *Dept. of Mineralogy and Petrography, Harvard University, Cambridge, Massachusetts, U.S.A.*

	Year of Election	
A	1937	HUTTENLOCHER, Heinrich Ferdinand, Ph.D. Professor of Mineralogy and Petrography in the University of Berne, *Gümligen, Berne, Switzerland.*
A	1936	HUTTON, Colin Osborne, M.Sc., Ph.D., F.G.S. Petrologist to the Geological Survey of New Zealand, 156 *The Terrace, Wellington, New Zealand.*
A	1936	ILLING, Vincent Charles, M.A., M.I.M.M., F.G.S. Assistant Professor of Geology (Oil Technology), *Imperial College of Science and Technology, South Kensington, London, S.W.* 7; and '*Links Corner*', *Ashtead, Surrey.*
A	1935	JACKSON, Henry Stanley Lawies, B.A. 33 *Pont Street, London, S.W.* 1.
A	1923	JARDINE, Irvine George, M.Sc., F.G.S. 27 *Cecil Road, Upton Manor, London, E.* 13.
A	1938	JHINGRAN, Anant Gopal, M.Sc., Ph.D. *Geological Survey of India,* 27 *Chowringhee Road, Calcutta, India.*
A	1925	JOHNSTON, Robert Angus Alister, F.R.S.C. 112 *Old Forest Hill Road, Toronto* 10, *Canada.*
L	1905	JONES, Bernard Mouat, D.S.O., M.A., F.C.S. Vice-Chancellor of the University of Leeds. '*Greystones*', 18 *North Hill Road, Leeds,* 6.
L	1908	JONES, Owen Thomas, M.A., D.Sc., F.R.S. Woodwardian Professor of Geology, *Sedgwick Museum, Cambridge.*
A	1930	JONES, William Richard, D.Sc., M.I.M.M., F.G.S. Assistant Professor in Mining Geology, *Imperial College of Science and Technology, South Kensington, London, S.W.* 7.
A	1936	JOPLIN, Miss Germaine Anne, B.Sc., Ph.D. *Dept. of Geology, University of Sydney, New South Wales.*
A	1929	KENNEDY, William Quarrier, D.Sc., Ph.D., F.G.S. Geological Survey of Great Britain (Scottish Office), '*Southpark*', 19 *Grange Terrace, Edinburgh.*
A	1938	KERR, Paul Francis, Ph.D. Associate Professor of Mineralogy, *Columbia University, New York City, U.S.A.*
A	1938	KINGSBURY, Arthur William Gerald. '*Cumberland Lodge*', *Bathwick Hill, Bath.*

Year of election

1930 Kôzu, Shukusuké, D.Sc. Professor of Mineralogy, *Mineralogical Institute, Tohoku Imperial University, Sendai, Japan.*

1926 Kreutz, Stefan, Ph.D. Professor of Mineralogy and Crystallography in the University of Kraków. *Collegium Minus, Gołębia* 11, *Kraków, Poland.*

1926 Krishnan, Maharajapuram Sitaram, M.A., Ph.D., A.R.C.S., D.I.C. *Geological Survey of India*, 27 *Chowringhee Road, Calcutta, India.*

1923 Larsen, Esper Signius, Ph.D. Professor of Petrology, *Harvard University, Cambridge, Massachusetts, U.S.A.*

1923 Leech, John George Chambré, A.R.S.M., F.G.S. 26 *Roedean Crescent, Roehampton, London, S.W.* 15.

1929 Lightfoot, Ben, M.C., M.A., F.G.S. Director of the Geological Survey, *P.O. Box* 366, *Salisbury, Southern Rhodesia.*

1914 Macgregor, Alexander Miers, M.A., F.G.S. Geological Survey, *P.O. Box* 366, *Salisbury, Southern Rhodesia.*

1929 MacGregor, Archibald Gordon, M.C., B.Sc., F.R.S.E., F.G.S. Geological Survey of Great Britain (Scottish Office), '*Southpark*', 19 *Grange Terrace, Edinburgh.*

1935 MacGregor, Malcolm, Ph.D., D.Sc., D.I.C., F.G.S. '*Ardchoille*', *Clynder, Helensburgh, Dumbartonshire.*

1929 Macgregor, Murray, M.A., D.Sc., F.R.S.E., F.G.S. Assistant Director, Geological Survey of Great Britain (Scottish Office), '*Southpark*', 19 *Grange Terrace, Edinburgh.*

1908 McLintock, William Francis Porter, D.Sc., F.R.S.E., F.G.S. Deputy Director and Curator, *Geological Survey and Museum, Exhibition Road, South Kensington, London, S.W.* 7.

1938 Marshall, Charles Edward, B.Sc., Ph.D., F.G.S. *Geology Dept., University of Birmingham, Edgbaston, Birmingham.*

1925 Marshall, Patrick, M.A., D.Sc., F.G.S. '*Hautere*', *Bellevue Road, Lower Hutt, Wellington, New Zealand.*

1927 Mathews, Charles William, F.G.S. 14 *Hatton Garden, London, E.C.* 1.

1930 Mauritz, Béla. Professor of Mineralogy and Petrology in the University of Budapest, *Muzeum-Körút* 4, *Budapest VIII, Hungary.*

	Year of Election	
A	1929	Mawson, Sir Douglas, Kt., O.B.E., D.Sc., B.E., F.R.S. Professor of Geology and Mineralogy, *University of Adelaide, South Australia.*
A	1938	Meen, Victor Ben, M.A., Ph.D. *Dept. of Mineralogy, University of Toronto, Canada.*
L	1919	Melmore, Sidney, B.Sc. '*Winkinghurst*', *Carr Lane, Acomb, York.*
L	C	Miers, Sir Henry Alexander, Kt., M.A., D.Sc., LL.D., D.C.L., F.R.S. Honorary Professor of Crystallography in the University of Manchester. 18 *Aberdare Gardens, West Hampstead, London, N.W.* 6.
A	1938	Mockler, George Stainbank, B.Sc. *King's College, Newcastle-upon-Tyne*, 2.
A	1937	Montgomery, Arthur. 277 *Park Avenue, New York City, U.S.A.*
L	1922	Mountain, Edgar Donald, M.A. Professor of Geology, *Rhodes University College, Grahamstown, South Africa.*
A	1932	Mourant, Arthur Ernest, M.A., D.Phil. 431 *Hatfield Road, St. Albans, Herts.*
A	1938	Nagelschmidt, Gunther, D.Ph. 7 *Stewart Road, Harpenden, Herts.*
A	1933	Nockolds, Stephen Robert, B.Sc., Ph.D., F.G.S. *Dept. of Mineralogy and Petrology, Downing Street, Cambridge.*
L	1920	Ōhaski, Ryōichi. Professor of Geology and Mineralogy, *Akita Mining College, Akita, Japan.*
A	1939	Osborne, George Davenport, D.Sc. *Dept. of Geology, The University, Sydney, New South Wales.*
A	1938	Panichi, Ugo, Professor and Director of the *Mineralogical Institute of the University of Pavia, Italy.*
A	1922	Parker, Robert Luling, Ph.D. Professor in the *Mineralogical Institute, Sonneggstrasse* 5, *Zürich* 6, *Switzerland.*
A	1938	Parrish, William, B.S., Ph.D. *Dept. of Geology and Mineralogy, Pennsylvania State College, State College, Pennsylvania, U.S.A.*
A	1915	Parsons, Arthur Leonard, Ph.D. Professor of Mineralogy and Director of the Royal Ontario Museum of Mineralogy *University of Toronto, Canada.*

Year of Election

1938 Payne, Cecil James, B.Sc. 55 *Hatton Garden, London, E.C.* 1.

1936 Peacock, Martin Alfred, M.A., Ph.D., D.Sc. Associate Professor of Mineralogy and Petrography, *University of Toronto, Canada.*

1937 Penrose, George. *Royal Institution of Cornwall, The Museum, Truro, Cornwall.*

1923 Phemister, James, M.A., D.Sc., F.R.S.E., F.G.S. *Geological Survey and Museum, Exhibition Road, South Kensington, London, S.W.* 7.

1926 Phemister, Thomas Crawford, Sc.M., Ph.D., D.Sc., F.G.S. Professor of Geology and Mineralogy, *Marischal College, University of Aberdeen.*

1926 Phillips, Frank Coles, M.A., Ph.D., F.G.S. University Lecturer in Petrology, *Corpus Christi College, Cambridge.*

1899 Pollard, William, M.A., D.Sc., F.G.S., F.C.S. *'Whitmore', Chittlehambolt, Umberleigh, North Devon.*

1910 Porter, Miss Mary Winearls, D.Sc. 118 *Southmoor Road, Oxford.*

1938 Pough, Frederick H., Ph.D. Assistant Curator of Mineralogy, *American Museum of Natural History, Central Park West at 79th Street, New York City, U.S.A.*

1930 Powell, Herbert Marcus, B.A. *Dept. of Mineralogy, University Museum, Oxford.*

1938 Praagh, Gordon van, B.Sc., Ph.D., F.C.S. *Christ's Hospital, Horsham, Sussex.*

1938 Prider, Rex Tregilgas, B.Sc., Ph.D., F.G.S. *Dept. of Geology, University of Western Australia, Perth, Western Australia.*

1940 Pryor, Thomas, Major, D.S.O., M.I.M.M. *'Westbourne House', Saltash, Cornwall.*

1922 Puckle, Geoffrey Montagu. *'The Oaks', Cooper's Hill, Eversley, Hampshire.*

1938 Pugh, William John, O.B.E., B.A., D.Sc., F.G.S. Professor of Geology, *The University, Manchester.*

1908 Raisin, Miss Catherine Alice, D.Sc., F.L.S., F.G.S. 10a *Wolverton Gardens, Ealing Common, London, W.* 5.

1903 Rastall, Robert Heron, M.A., Sc.D., F.G.S., M.I.M.M. *Christ's College, Cambridge.*

Year of Election

A 1923 Read, Herbert Harold, D.Sc., A.R.C.S., F.R.S. Professor of Geology, *Imperial College of Science and Technology, South Kensington, London, S.W.* 7.

A 1932 Reynolds, Miss Doris Livesey (Mrs. Arthur Holmes), D.Sc., F.G.S. *Science Laboratories, South Road, Durham.*

A 1915 Richardson, William Alfred, O.B.E., D.Sc., B.A., B.Sc. (Engin.), F.G.S. Principal of the *Technical College, Green Lane, Derby.*

A 1929 Richey, James Ernest, M.C., B.A., D.Sc., F.R.S. Geological Survey of Great Britain (Scottish Office), '*Southpark*', 19 *Grange Terrace, Edinburgh.*

A 1914 Rogers, Arthur William, M.A., Sc.D., F.R.S. Formerly Director of the Geological Survey of the Union of South Africa. 8 *Rhodes Avenue, Mowbray, Cape Province, South Africa.*

A 1913 Rogers, Austin Flint, A.M., Ph.D. Professor of Mineralogy and Petrography, *Stanford University, California, U.S.A.*

A 1935 Rose, William Colin Campbell, M.Sc., F.G.S. *Geological Survey and Museum, Exhibition Road, South Kensington, London, S.W.* 7; and 2 *Woodway Court, Woodway Crescent, Harrow, Middlesex.*

A 1902 Russell, Arthur Edward Ian Montagu, M.B.E. *Swallowfield Park, Swallowfield, Reading, Berkshire.*

A 1929 Sampson, Edward, C.E., M.Sc., D.Sc. Professor of Geology, Princeton University, *Guyot Hall, Princeton, New Jersey, U.S.A.*

A 1931 Schairer, John Frank, M.S., Ph.D. *Geophysical Laboratory,* 2801 *Upton Street, Washington, D.C., U.S.A.*

A 1912 Schaller, Waldemar Theodore, Ph.D. *United States Geological Survey, Washington, D.C., U.S.A.*

A 1933 Scheumann, Karl Hermann. Professor of Mineralogy and Petrology, *Mineralogical Institute, The University,* 38 *Talstrasse, Leipzig, Germany.*

A 1919 Schoeller, Walter Raymond, Ph.D. 8 *Victoria Avenue, Bishopsgate, London, E.C.* 2.

Year of Election

1920 Schoep, Alfred, D.Sc. Professor of Crystallography and Mineralogy in the University of Gent, 6 *Rue de la Roseraie, Gent, Belgium.*

1928 Scholtz, Douglas Leinster, D.Sc. Professor of Geology, *University of Stellenbosch, South Africa.*

1914 Scott, Alexander, M.A., D.Sc. '*Eversley*', *Albert Terrace. Wolstanton, Stoke-on-Trent, Staffordshire.*

1932 Scrivenor, John Brooke, I.S.O., M.A., F.G.S. 68 *Chaucer Road, Bedford.*

1908 Shand, Samuel James, D.Sc., Ph.D., F.G.S. Professor of Geology, *Columbia University, New York City, U.S.A.*

1938 Shukri, Nasri Metri, B.Sc., Ph.D., F.G.S. *Laboratoire de Géologie, Faculté des Sciences, Abbassia, Cairo, Egypt.*

1936 Simmons, William Charles, B.Sc., A.R.C.S., F.G.S. '*Trigonia*', *Spur Hill Avenue, Parkstone, Dorset.*

1937 Simmons, William Percy. Curator, Royal Geological Society of Cornwall, *The Museum, Penzance*; and *Lelant, Cornwall.*

1907 Simpson (formerly Hilton), Harold, M.A., D.Sc. Professor of Mathematics in the University of London. *Bedford College, Regent's Park, London, N.W.* 1.

1935 Smethurst, Arthur Frederick, The Reverend, B.Sc., Ph.D., A.R.C.S., F.G.S., F.C.S., F.R.G.S. *The Vicarage, Market Lavington, Devizes, Wilts.*

1897 Smith, George Frederick Herbert, M.A., D.Sc., F.R.A.S. 9 *Ellerton Road, Wandsworth Common, London, S.W.* 18.

1911 Smith, Herbert Gladstone, B.Sc., A.R.C.S., F.G.S. Reader in Geology in the University of London, *Queen Mary College, Mile End Road, London, E.* 1.

1910 Smith, Walter Campbell, Lieut.-Colonel, M.C., T.D., M.A., Sc.D., F.G.S. Keeper of Minerals, *British Museum of Natural History, South Kensington, London, S.W.* 7.

1933 Smythe, John Armstrong, D.Sc., Ph.D. Lecturer in Metallurgy, *King's College, University of Durham, Newcastle-on-Tyne*, 2; and 10 *Queen's Gardens, Benton, Forest Hall, Northumberland.*

	Year of Election	
A	1929	SOLIGNAC, Marcel Jean Louis, D.-ès-Sc. Chef du Service Géologique de Tunisie, 12 *Rue Émile Duclaux, Tunis.*
A	1940	SOPER, Henry Robert, B.Sc., A.R.C.S. 17 *Mulgrave Street, The Hoe, Plymouth.*
A	1925	SPENCER, Edmondson, Ph.D., D.Sc., A.R.S.M., F.I.C., F.G.S. *c/o Messrs. Bird & Co.* (*Research Dept.*), *Post Box* 46, *Calcutta, India.*
A	1894	SPENCER, Leonard James, C.B.E., B.Sc., M.A., Sc.D., F.R.S. 111 *Albert Bridge Road, London, S.W.* 11.
A	1928	SPILLER, Reginald Charles, M.A. Demonstrator in Mineralogy, *Dept. of Mineralogy, University Museum, Oxford.*
A	1935	STANLEY, John Herbert. 58 *Dewsbury Road, Dollis Hill, London, N.W.* 10.
A	1940	STEWART, Frederick Henry, B.Sc. 7 *Rubislaw Den South, Aberdeen.*
A	1923	STILLWELL, Frank Leslie, D.Sc. 44 *Elphin Grove, Hawthorne, Victoria, Australia.*
A	1923	STOCKLEY, Gordon Murray, A.R.C.S., A.I.C., F.G.S. *c/o The Government Secretary, Maseru, Basutoland, South Africa.*
A	1926	STUART, Alan, M.Sc., F.G.S. 32 *Gwydr Crescent, Uplands, Swansea, South Wales.*
A	1938	STUDT, Frank Edward, B.Sc., A.R.S.M. *c/o Rhokana Corporation, Ltd., 'Nkana Mine, Northern Rhodesia.*
A	1928	SWEET, Miss Jessie May, B.Sc. *Mineral Dept., British Museum of Natural History, South Kensington, London, S.W.* 7.
A	1941	TAYLOR, Edward Drummond, M.-ès-Sc. *Kew House, Caufeild, British Columbia, Canada.*
A	1938	TAYLOR, William Hodge, Ph.D., D.Sc. *Physics Dept., College of Technology, Manchester,* 1.
A	1939	THOMAS, Richard Grenfell, B.Sc. *Animal Nutrition Laboratory, The University, Adelaide, South Australia.*
A	1925	THOMSON, Ellis, B.A.Sc. Professor, *Dept. of Mineralogy, University of Toronto, Canada.*
A	1921	TILLEY, Cecil Edgar, B.Sc., Ph.D., F.R.S. Professor of Mineralogy and Petrology, *Dept. of Mineralogy and Petrology, Downing Street, Cambridge.*

Year of Election

1925 Tomkeieff, Sergei Ivanovich, M.Sc., F.G.S. *Dept. of Geology, King's College, University of Durham, Newcastle-on-Tyne*, 2.

1937 Townley, Kenneth Allison, B.Sc., A.R.C.S., F.G.S. *Dept. of Geology, The University, Liverpool*, 3.

1927 Trechmann, Charles Taylor, D.Sc., F.G.S., F.Z.S. *'Hudworth Tower', Castle Eden, Co. Durham.*

1923 Tsuboi, Seitarō. *Geological Institute, College of Science, Imperial University, Tokyo, Japan.*

1920 Tunbridge, Edward William, B.Sc., F.G.S. *'Westbury', Lillington, Leamington Spa, Warwickshire.*

1939 Tunell, George, Ph.D. *Geophysical Laboratory, 2801 Upton Street, Washington, D.C., U.S.A.*

1938 Tyrrell, George Walter, A.R.C.S., Ph.D., D.Sc., F.G.S., F.R.S.E. *Dept. of Geology, The University, Glasgow.*

1936 Vance, Robert Christopher. *Woodland Road, Long Meadow, Pittsford, New York State, U.S.A.*

1933 Vaux, George, B.S., F.R.G.S. *'The Thicket', Bryn Mawr, Pennsylvania, U.S.A.*

1925 Vendl, Aladár, Ph.D. Professor in the Technical High School, *Rezeda utca 7, Budapest I, Hungary.*

1925 Vendl, Miklós, Ph.D. Professor of Mineralogy and Geology, *Mining Academy, Sopron, Hungary.*

1937 Vésignié, Jean Paul Louis, Colonel (retired). 22 *Rue du Général Foy, Paris VIII, France.*

1930 Vickers, Arthur Eric Jarvis, M.Sc., Ph.D., F.I.C., F.G.S. *'Hazeldene', Junction Road, Norton-on-Tees, Co. Durham.*

1937 Vincent, Herbert Cubitt Gostling, M.A., F.G.S., F.C.S. *Dept. of Mineralogy and Petrology, Downing Street, Cambridge.*

1930 Wager, Lawrence Rickard, M.A., Sc.D., B.Sc., F.G.S. *Dept. of Geology, University of Reading, Reading, Berkshire.*

1930 Walker, Frederick, M.A., Ph.D., D.Sc., F.R.S.E., F.G.S. Professor of Mineralogy and Geology, *University of Cape Town, Rondebosch, South Africa.*

1936 Walls, Robert, M.Sc., Ph.D., F.G.S. *c/o Lobitos Oilfield Co. Ltd., Lobitos, Peru.*

	Year of Election	
A	1937	Warburg, Robert Oscar, M.A., A.R.S.M., F.G.S. *Mineral Resources Dept., Imperial Institute, South Kensington, London, S.W.* 7.
A	1923	Watson, John Adam, A.C.G.I., F.I.C. 26 *Thorburn Road, Colinton, Edinburgh.*
L	1894	Watts, William Whitehead, M.A., M.Sc., Sc.D., LL.D., F.R.S. Emeritus Professor of Geology in the Imperial College of Science and Technology. *Hasler Cottage, Hasler Crescent, Church Stretton, Shropshire.*
A	1937	Way, Henry James Reginald, B.Sc., A.R.S.M., F.G.S. *c/o Barclays Dominion and Overseas Bank, Durban, South Africa.*
A	1929	Wayland, Edward James, C.B.E., A.R.C.S., M.I.M.M., F.G.S. Formerly Director of the Geological Survey of Uganda. *'Alland Grange', Manston, near Minster in Thanet, Kent.*
A	1929	Weber, Leonhard, Ph.D. Professor of Mineralogy, *Institut de Minéralogie, Université, Fribourg, Switzerland.*
A	1929	Wells, Alfred Kingsley, D.Sc., F.G.S. Reader in Geology at King's College, London. 114 *Queen's Road, Buckhurst Hill, Essex.*
A	1929	West, William Dixon, M.A. *Geological Survey of India,* 27 *Chowringhee Road, Calcutta, India.*
L	1901	Weston, Digby St. Aubyn Percy, Commander, Royal Navy (retired). 7 *Creswell Gardens, London, S.W.* 5.
A	1924	Whitlock, Herbert Percy. *American Museum of Natural History, Central Park West at 79th Street, New York City, U.S.A.*
A	1918	Wilcockson, William Howson, M.A., F.G.S. *Dept. of Geology, University of Sheffield.*
L	1925	Williams, Alpheus Fuller, B.Sc. *Ver Genoeg, Muizenberg, Cape Town, South Africa.*
A	1938	Williams, David, Ph.D., M.Sc., B.E., F.G.S., A.I.M.M. *Imperial College of Science and Technology, South Kensington, London, S.W.* 7.
A	1933	Wilson, Gilbert, Ph.D., M.Sc., D.I.C., F.G.S. *Dept. of Geology, Imperial College of Science and Technology, South Kensington, London, S.W.* 7.

Year of Election

1931 Wilson, Reginald Charles, D.Sc., F.G.S. Director of the *Geological Survey of Nigeria, Kaduna Junction, Nigeria;* and 8 *Duke's Avenue, Muswell Hill, London, N.* 10.

1934 Wiseman, John Dugdale Holt, M.A., Ph.D., F.G.S. *Mineral Dept., British Museum of Natural History, South Kensington, London, S.W.* 7.

1927 Wooster, William Alfred, M.A., Ph.D. Demonstrator in Mineralogy in the University of Cambridge. *Peterhouse, Cambridge.*

1919 Worth, Richard Hansford, M.Inst.C.E., F.G.S. 32 *Thornhill Road, Plymouth.*

1923 Wright, Frederic Eugene, Ph.D. *Geophysical Laboratory,* 2801 *Upton Street, Washington, D.C., U.S.A.*

1937 Yatsevitch, Gratian Michael, A.B., A.M. *Cornish, New Hampshire, U.S.A.*

PROCEEDINGS

OF THE

MINERALOGICAL SOCIETY

(1940)

EXCERPT MINUTES OF COUNCIL MEETING

Held in the Apartments of the Geological Society, Burlington House, London, W., January 25, 1940, *at* 2 *p.m.*

Mr. Arthur Russell, President, in the Chair.

Major Thomas Pryor, D.S.O., was proposed and provisionally elected an Ordinary Member of the Society. The resignation of Lady McRobert was accepted. The name of Mr. W. Burton was removed from the list of Members for non-payment of subscriptions.

The Treasurer presented the audited annual accounts and balance-sheet for 1939, which were approved.

A letter of resignation from the office of Trustee was read from Sir Henry Miers, and it was agreed that a special letter be sent to him expressing the deep appreciation of the Council of his services to the Society. The Treasurer submitted a memorandum, which he had already circulated to members of the Council, proposing that two Managing Trustees (Mr. F. N. Ashcroft and Professor C. E. Tilley were proposed) and an impersonal Custodian Trustee (the Society's bankers, Messrs. Coutts & Co. being proposed) be appointed. This would involve certain alterations in the bye-laws, a draft of which was submitted by the Treasurer. After some discussion these alterations were approved for submission to the Society at a special general meeting to precede the next ordinary meeting on March 7, 1940 (Bye-laws 11–17 and 22, pp. viii–ix).

GENERAL MEETING

Held in the Apartments of the Geological Society, Burlington House, London, W., January 25, 1940, *at* 3 *p.m.*

Mr. Arthur Russell, President, in the Chair.

Thirty-one Members and five Visitors were present.

The election of Major Thomas Pryor as an Ordinary Member of the Society was confirmed.

The following exhibits were briefly explained:

1. A suite of brookite crystals from the Lungernthal, Maderanerthal, Uri, Switzerland (Mr. F. N. Ashcroft).

2. A polished specimen of precious opal in demonstration of its paragenesis (Mr. A. Broughton Edge).

The following papers were then read:

1. The structure of orthoclase: by Mr. S. H. Chao, Mr. A. Hargreaves, and Dr. W. H. Taylor (vol. 25, p. 498).

2. The existence of reversible photosensitivity in some artificial materials containing rutile: by Dr. W. O. Williamson (communicated and read by the General Secretary) (vol. 25, p. 513).

3. Notes on the occurrence of fluorite in the west Cumberland iron mines and in the Lake District of Cumberland and Westmorland: by Mr. Arthur Russell.

4. A new method for the preparation of thin sections of clays: by Mr. A. V. Weatherhead (communicated and read by the General Secretary) (vol. 25, p. 529).

5. A note on crystallographic calculations: by Dr. M. H. Hey (vol. 25, p. 534).

EXCERPT MINUTES OF COUNCIL MEETING

Held in the Apartments of the Geological Society, Burlington House, London, W., March 7, 1940, *at* 2.45 *p.m.*

Mr. Arthur Russell, President, in the Chair.

Professor Joseph Désiré Hubert Donnay and Dr. John Albert Newton Friend were proposed and provisionally elected Ordinary Members of the Society. The resignation of Professor Adolf Pabst was accepted.

Reports were received from the Treasurer and the Editor.

Further consideration was given to the proposed amended bye-laws.

SPECIAL GENERAL MEETING

Held in the Apartments of the Geological Society, Burlington House, London, W., March 7, 1940, *at* 4.30 *p.m.*

Mr. Arthur Russell, President, in the Chair.

Twenty-nine Members were present.

The President moved the adoption of the amendments to the bye-laws proposed by the Council and previously circulated to Members. The motion was seconded by Mr. F. N. Ashcroft and carried unanimously without discussion (Bye-laws nos. 11–17 and 22, pp. viii–ix).

GENERAL MEETING

Held in the Apartments of the Geological Society, Burlington House, London, W., March 7, 1940, at 4.40 p.m.

Mr. Arthur Russell, President, in the Chair.

Twenty-nine Members and seven Visitors were present.

The elections of Professor J. D. H. Donnay and Dr. J. A. N. Friend as Ordinary Members of the Society were confirmed.

The following papers were read:

1. Mineral localities of the Mendip Hills, Somerset: by Mr. A. W. G. Kingsbury.

2. Colloidal gold as a colouring principle in minerals: by Dr. J. Newton Friend and Mr. J. P. Allchin (vol. 25, p. 584).

3. The composite dike at Brockhill, Worcestershire: by Dr. J. H. Taylor (communicated by Dr. James Phemister) (vol. 25, p. 538).

4. Note on an occurrence of bertrandite and beryl at the South Crofty mine, Cornwall: by Dr. James Phemister (vol. 25, p. 573).

5. Iron-rich kornerupine from Port Shepstone, Natal: by Mr. J. E. de Villiers (communicated and read by the General Secretary) (vol. 25, p. 550).

6. On maucherite (nickel-speiss, placodine, temiskamite): by Dr. M. A. Peacock (read by Mr. F. A. Bannister) (vol. 25, p. 557).

EXCERPT MINUTES OF COUNCIL MEETING

Held in the Apartments of the Geological Society, Burlington House, London, W., June 6, 1940, at 4 p.m.

Mr. Arthur Russell, President, in the Chair.

Mr. Cecil Edward Nowill Bromehead and Mr. Henry Robert Soper were provisionally elected Ordinary Members of the Society. The resignation of Dr. R. M. Shackleton was accepted. The deaths of Professor W. C. Brögger, Honorary Member, and of Mr. D. J. Arkell and Mr. F. W. Dennis, Ordinary Members, were reported.

Reports were received from the Treasurer and the Editor.

The following dates for meetings in 1941 were approved: Thursdays, January 23, March 13, June 5, November 6.

The list of Officers and Council for 1940–41 was considered. The following were due to retire: Vice-President, Professor C. E. Tilley; Ordinary Members of Council, Dr. G. F. H. Smith, Dr. F. C. Phillips, Sir Lewis L. Fermor, and Mr. G. E. Howling. The following were

roposed for submission to the Society: as Vice-President, Professor
1. H. Read; as Ordinary Members of Council, Dr. A. J. Bull, Dr. L.
Hawkes, Mr. E. H. Beard, and Miss J. M. Sweet.

GENERAL MEETING

Held in the Apartments of the Geological Society, Burlington House, London, W., June 6, 1940, *at* 5.30 *p.m.*

Mr. Arthur Russell, President, in the Chair.

Twenty-two Members and two Visitors were present.

The elections of Mr. C. E. N. Bromehead and Mr. H. R. Soper as Ordinary Members of the Society were confirmed.

The following exhibit was briefly explained:

Air bubbles in cellulose acetate films for examining optical interference-figures (Dr. A. T. J. Dollar).

The following papers were then read:

1. Dravite-bearing rocks from Dinas Head, Cornwall: by Mr. S. O. Agrell.

2. On sulphatic cancrinite and analcime (eudnophite) from Loch Borolan, Assynt: by Mr. F. H. Stewart (communicated by Prof. C. E. Tilley) (vol. 26, p. 1).

3. Studies of mineral sulpho-salts: II. Jamesonite from Cornwall and Bolivia: by Mr. L. G. Berry (read by Mr. F. A. Bannister) (vol. 25, p. 597).

4. A note on the determination of barium and strontium in a carbonate rock: by Dr. M. H. Hey.

5. Bravoite from Mill Close mine, Derbyshire: by Mr. F. A. Bannister, with chemical analysis by Dr. M. H. Hey (vol. 25, p. 609).

6. The Tauq, 'Iraq, meteorite: by Dr. W. A. Macfadyen and Dr. G. F. Claringbull (vol. 25, p. 615).

7. Fifteenth list of new mineral names; with an index of authors: by Dr. L. J. Spencer (vol. 25, p. 621).

8. The selenium and tellurium contents of sulphur from Krisuvik, Iceland: by Dr. J. Newton Friend and Mr. J. P. Allchin (vol. 26, p. 9).

EXCERPT MINUTES OF COUNCIL MEETING

Held in the Apartments of the Geological Society, Burlington House, London, W., November 7, 1940, *at* 11.45 *a.m.*

Sir Thomas Holland, Past-President; and later Mr. Arthur Russell, President, in the Chair.

Mr. Frederick Henry Stewart was provisionally elected an Ordinary

Member of the Society. The deaths of Mr. G. S. Blake, Colonel H. W. Lake, Sir Robert A. Hadfield, Mr. Lazard Cahn, and Mr. C. A. Silberrad, Ordinary Members, were reported. The election in 1939 of Prof. A. W. Pavlow was declared void, neither entrance fee nor subscription having been paid.

Reports were received from the Treasurer and the Editor.

The General Secretary presented the draft annual report of Council, which was approved.

Prof. H. L. Bowman and Dr. J. V. Harrison were proposed as auditors of the Society's accounts.

GENERAL (ANNIVERSARY) MEETING

Held in the Apartments of the Geological Society, Burlington House, London, W., November 7, 1940, *at* 2 *p.m.*

Mr. Arthur Russell, President, in the Chair.

Seventeen Members were present.

Dr. M. H. Hey and Dr. A. T. J. Dollar were appointed as scrutineers of the voting papers for the election of Officers and Council.

The election of Mr. F. H. Stewart as an Ordinary Member of the Society was confirmed.

The General Secretary then read the following:

Annual Report of Council for 1939–40.

At the four ordinary meetings held during the session 1939–40, 23 papers have been read. The total attendance at these meetings was 100 members and 19 visitors.

The Society has lost by death seven ordinary members, Mr. D. J. Arkell, Mr. G. S. Blake, Mr. Lazard Cahn, Mr. F. W. Dennis, Sir Robert A. Hadfield, Colonel H. W. Lake, and Mr. C. A. Silberrad; and one honorary member, Professor W. C. Brögger.

Ten new members have been elected, three members have resigned, and the name of one other has been removed from the list of members on account of arrears in subscription. On October 31 the membership was 264 including 6 honorary members.

The four numbers (167–170) of the Mineralogical Magazine published during the year have contained 22 papers in 236 pages, with 13 plates, and 703 abstracts in 192 pages.

The accounts for the year ending December 30, 1939, showed an excess of assets over liabilities of £1452. 9*s*. 1*d*. against £1466. 4*s*. 6*d*. on December 31, 1938. These assets do not include the periodicals retained when the Society's Library was sold and the stock of unsold publications, nor the securities allocated to the Composition Fees Account. The value of the Securities standing in the names of the Trustees on December 30, 1939, was: General Reserve £1026. 11*s*. 1*d*., Composition Fees Account £974. 12*s*. 8*d*., against £1065. 3*s*. 5*d*. and £1003. 18*s*. 5*d*. respectively on December 31, 1938. One Composition Fee of £15. 15*s*. 0*d*. was received in 1939 and invested, 3½ per cent. War Loan being purchased. Since the beginning of the current year, a further Composition Fee of £10. 10*s*. 0*d*. has been received and

ıvested, and the Society's General Reserve has been added to. £100. 0*s*. 0*d*. 3 per ent. War Loan was applied for when that loan was issued, and the stock received as been apportioned between the General Reserve (£89 10*s*. 0*d*. Stock) and the Com- osition Fees Account (£10. 10*s*. 0*d*. Stock). The cost of the stock purchased was 99. 18*s*. 9*d*.

Early in 1940 Sir Henry A. Miers, who has been a Trustee of the Society since 911, intimated his desire to relinquish that office. His resignation was accepted ith great regret, and the Council desires to record in this report its sincere apprecia- of his services to the Society in that capacity and in others over so many years. ollowing on his retirement and upon ratification of certain necessary amendments o the Bye-Laws, which were approved at a Special General Meeting held on March 7, 940, the Society's Bankers, Messrs. Coutts & Co., were appointed Custodian rustee, and Mr. F. N. Ashcroft, who was Trustee with Sir Henry Miers, and Pro- essor C. E. Tilley Managing Trustees. It was felt that under existing conditions was advisable that the Society's invested funds should stand in the name of a orporate Body authorized by law to act as Trustee, rather than in the names of ndividuals.

The effect of the war on the Society's finances has been considerable, and will be nuch more severely felt in the future. The diminution in annual subscriptions eceived since the beginning of 1940, while appreciable, has not been as large as night have been expected. The most serious fall has been in the receipts from the Society's publishers for sales of the Mineralogical Magazine, which amounted to £179. 11*s*. 10*d*., against £248. 10*s*. 4*d*. in 1939, and which were well below the aver- ge receipts from this source for the previous five years. On the other hand, print- ng costs and other expenses have risen.

The cash at Bankers, in the Post Office Savings Bank, and in hand at the present ime amounts to £313. 11*s*. 10*d*. Interest on Investments and other receipts will, t is anticipated, bring in about £46. 10*s*. 0*d*. The expenditure during the remainder f the year is estimated at about £200.

On the proposal of Dr. L. Hawkes, seconded by Dr. G. F. H. Smith, the adoption of the above report was carried unanimously.

A vote of thanks to the Geological Society for the use of its rooms was proposed by Mr. F. A. Bannister, seconded by Dr. L. J. Spencer, and carried with acclamation.

The scrutineers reported that 19 voting papers for the Officers and Council for the ensuing session had been received and that the list nominated by the Council had been approved:

President. Mr. Arthur Russell, M.B.E. [F.G.S.

Vice-Presidents. Lt.-Col. W. Campbell Smith, M.C., T.D., M.A., Sc.D., Prof. H. H. Read, D.Sc., F.R.S.

Treasurer. F. N. Ashcroft, M.A., F.G.S., F.C.S.

General Secretary. Dr. G. F. Claringbull, B.Sc., Ph.D., F.G.S.

Foreign Secretary. Sir Thomas H. Holland, K.C.S.I., K.C.I.E., D.Sc., LL.D., F.R.S.

Editor of the Journal. Dr. L. J. Spencer, C.B.E., M.A., Sc.D., F.R.S.

[*continued on p. xlii.*

ABSTRACT OF RECEIPTS AND PAYMENTS

GENERAL PUR-

Receipts	£	s.	d.	£	s.	d.
By Balances brought in from 1939—						
1. At Bankers:						
(*a*) Current Account	10	9	9			
(*b*) Deposit Account	20	0	0			
2. In Post Office Savings Bank	288	19	11			
3. In Office	2	3	11			
				321	13	7
Entrance Fees				10	10	0
Annual Subscriptions—						
1. Current Year	206	17	0			
2. Arrears	5	5	0			
3. In Advance	2	2	0			
				214	4	0
Sale of Publications—						
1. By Publishers, April 1, 1939–March 31, 1940. Sales at subscription rate £241 10*s.* 0*d.* and other sales £21 1*s.* 6*d.*, less trade discount and commission £67 8*s.* 0*d.* and distribution charges £15 11*s.* 8*d.*	179	11	10			
2. By Custodian of Stock, 1940, £20 8*s.* 0*d.* less distribution charges £1 4*s.* 3*d.*	19	3	9			
				198	15	7
Advertisement Fees £21 18*s.* 9*d.* less commission £4 7*s.* 9*d.*				17	11	0
Interest on Investments including Income Tax recovered—						
1. £693 3½% War Loan, 1952 and after, Inscribed Stock	24	5	2			
2. £105 4% Consolidated Loan, 1957, Inscribed Stock	4	4	0			
3. £100 4% Funding Loan, 1960–90, Inscribed Stock	4	0	0			
4. £201 Metropolitan Water Board 3% 'B' Stock, Inscribed	6	0	8			
5. £89 10*s.* 0*d.* 3% War Loan, 1955–59, Inscribed Stock	1	6	10			
				39	16	8
Deposit Interest—						
1. Bankers	0	5	5			
2. Post Office Savings Bank	6	13	10			
				6	19	3
Small receipts				0	6	3
Transfers from other Accounts—						
From Composition Fees Account, being Interest on Investments				36	9	1
				£846	5	5

SOCIETY

FOR THE YEAR ENDING DECEMBER 31, 1940

POSES ACCOUNT

Payments	£ s. d.	£ s. d.
To Printing and distributing the Mineralogical Magazine Nos. 168–171 inclusive (Oxford University Press)		
1. Printing	415 17 7	
2. Illustrations	36 15 2	
3. Authors' Separate Copies	29 7 4	
4. Distribution Charges	15 0 6	
5. Postal Wrappers (renewal of Stock)	3 5 0	
	—	500 5 7
Printing and distributing Notices of Meetings and other annual miscellaneous printing		16 5 4
Miscellaneous Printing, &c. (not annual)—		
1. Notices re the revision of the Bye-laws and Special General Meeting, including distribution charges	5 12 2	
2. Treasurer's notices	0 13 0	
		6 5 2
Expenses at Meetings—		
1. Operator of Lantern	2 2 0	
2. Porter	1 0 0	
3. Tea	2 18 0	
		6 0 0
Custodian Trustee's and Brokers' Charges—		
1. Acceptance Fee	5 10 10	
2. Income Fee	0 11 4	
3. Transference of Stocks (Brokers' charge)	1 1 0	
		7 3 2
Care of Stock of Publications, J. Mugford, Annual Fee		1 1 0
Editor's Honorarium		50 0 0
Stationery, including new Minute and Account Books		6 2 3
Postage and telegrams—		
1. Hon. Secretary	0 18 6	
2. Editor (not charged)	0 0 0	
3. Hon. Treasurer	1 4 8	
		2 3 2
Emergency Expenditure—		
1. Duplicating Accounts	1 5 10	
2. Packing and transport of the Society's Records &c.	0 13 11	
3. Repairs to damaged Record Book	1 10 6	
		3 10 3
Bank Charges, Cheque Book and other small items		0 16 10
Investments: Purchase of £89 10*s.* 0*d.* 3% War Loan, 1955–59, Inscribed Stock		89 8 9
Balances December 31, 1940—		
1. At Bankers:		
(*a*) Current Account	48 14 3	
(*b*) Deposit Account	0 0 0	
2. In Post Office Savings Bank	106 13 10	
3. In Office	1 15 10	
		157 3 11
		£846 5 5

Examined and compared with Vouchers and found correct.

H. L. BOWMAN
J. V. HARRISON } Auditors.

January 16, 1941.

F. N. ASHCROFT, Hon. Treasurer.

Ordinary Members of Council

Prof. H. L. Bowman, M.A., D.Sc., F.G.S.

Dr. H. F. Harwood, M.Sc., Ph.D., F.I.C.

Dr. W. F. P. McLintock, D.Sc., F.R.S.E., F.G.S.

Dr. J. Phemister, M.A., D.Sc., F.R.S.E., F.G.S.

F. A. Bannister, M.A.

Dr. S. R. Nockolds, B.Sc., Ph.D., F.G.S.

Prof. Harold Simpson, M.A., D.Sc.

S. I. Tomkeieff, M.Sc., F.G.S.

E. H. Beard, B.Sc.

Dr. A. J. Bull, M.Sc., Ph.D., F.G.S.

Dr. L. Hawkes, D.Sc., F.G.S.

Miss J. M. Sweet, B.Sc.

A vote of thanks to the retiring Vice-President and Ordinary Members of Council was proposed by Dr. A. J. Bull, seconded by Mr. C. F. Davidson, and carried.

The following exhibit was briefly explained:

Microscope slides to illustrate a course in comparative mineralogy, showing grains and crushed fragments of various minerals (Dr. A. T. J. Dollar).

The following papers were then read:

1. Optical properties of olivines from Ubekendt island, west Greenland: by Mr. P. M. Game (vol. 26, p. 11).

2. The crystal-structure of violarite: by Mr. F. A. Bannister (vol. 26, p. 16).

3. The determination of ferrous iron in resistant silicates: by Dr. M. H. Hey.

4. On prismatic joints in two Scottish sandstones: by Dr. A. T. J. Dollar.

PROCEEDINGS

OF THE

MINERALOGICAL SOCIETY

(1941)

EXCERPT MINUTES OF COUNCIL MEETING

Held in the Apartments of the Geological Society, Burlington House, London, W., January 23, 1941, *at* 12 *noon.*

Mr. Arthur Russell, President, in the Chair.

Lieut. Edward Drummond Taylor was proposed and provisionally lected an Ordinary Member of the Society. The resignation of Mr. D. J. ear was accepted. The names of certain members in arrear with their nnual subscriptions were read, and that of Dr. S. W. Wooldridge was emoved from the List of Members.

The Treasurer presented the audited annual accounts and balance-heet for 1940, which were approved; and he stated that precautionary easures had been taken for the safety of the Society's archives, and that e had reported to the Royal Society on the financial position of the ociety.

A report was received from the Editor, who stated that the editing of he Magazine had been done from the Mineral Department of the British Iuseum (by T. Davies, L. Fletcher, H. A. Miers, and L. J. Spencer) for ver fifty years, and that this might very well be continued.

GENERAL MEETING

Held in the Apartments of the Geological Society, Burlington House, London, W., January 23, 1941, *at* 2.30 *p.m.*

Mr. Arthur Russell, President, in the Chair.

Twenty Members and three Visitors were present.

The election of Lieut. E. D. Taylor as an Ordinary Member of the ociety was confirmed.

The following exhibit was briefly explained: Spherulitic masses of -blende replacing limestone from Rotherhope Fell mine, Cumber-n ', and baryte replacing limestone from Silverband mine, Westmor-nd (Dr. K. C. Dunham).

The following papers were then read:

1. A micro-chemical analysis of kornerupine: by Dr. M. H. Hey (vol. 26, p. 119).

2. Hydrozincite from Narlarla, West Kimberley district, Western Australia: by Dr. R. T. Prider (read by the General Secretary) (vol. 26, p. 60).

3. Osbornite, meteoritic titanium nitride: by Mr. F. A. Bannister (vol. 26, p. 36).

4. Note on some minerals either new or rare to Britain: by Mr. Arthur Russell.

EXCERPT MINUTES OF COUNCIL MEETING

Held in the Apartments of the Geological Society, Burlington House, London, W., March 13, 1941, *at* 2 *p.m.*

Mr. Arthur Russell, President, in the Chair.

Mr. George Howard Osborn was provisionally elected an Ordinary Member of the Society. The resignation of Mr. H. C. G. Vincent was accepted.

Reports were received from the Treasurer and the Editor. The Treasurer stated that the bulk of the stock of the *Mineralogical Magazine* had been removed for safety to the University Press at Oxford, and it was agreed that a letter of thanks be sent to Dr. John Johnson, Printer to the University, for kindly providing storage room.

It was decided to present the four numbers of the Magazine for 1941 to the Chinese University Libraries of Peiping and Chungking.

GENERAL MEETING

Held in the Apartments of the Geological Society, Burlington House, London, W., March 13, 1941, *at* 3.30 *p.m.*

Mr. Arthur Russell, President, in the Chair.

Twenty-four Members and three Visitors were present.

The election of Mr. G. H. Osborn as an Ordinary Member of the Society was confirmed.

Dr. A. T. J. Dollar exhibited a hemispherical rotational apparatus of thermo-plastic resin for use on the microscope stage.

The following papers were then read:

1. The Gibeon shower of meteoritic irons in South-West Africa: by Dr. L. J. Spencer (vol. 26, p. 19).

2. Metasomatism in the basalt of Haddenrig quarry near Kelso, and the veining of the rocks exposed there: by Mr. S. I. Tomkeieff (read by Dr. J. Phemister) (vol. 26, p. 45).

3. Note on the occurrence of spinel as a product of combustion of German incendiary bombs: by Dr. G. F. Claringbull.

EXCERPT MINUTES OF COUNCIL MEETING

Held in the Apartments of the Geological Society, Burlington House, London, W., June 5, 1941, at 3.30 p.m.

Mr. Arthur Russell, President, in the Chair.

Messrs. Cyril Jukes, Peter Zodac, and Reginald Stevenson Collins were provisionally elected Ordinary Members of the Society. The resignation of Dr. G. van Praagh was accepted. The death of Prof. C. G. Cullis was reported.

Reports were received from the Treasurer and the Editor.

A letter was received from the Royal Society announcing that a sum of £100 had been allocated to the Society from the Rockefeller Foundation Grant as an aid to scientific publications.

The following dates for the meetings in 1942 were approved: Thursdays, January 22, March 19, June 4, November 5.

The list of Officers and Council for 1941–2 was considered. The following were due to retire: Vice-President, Lieut.-Col. W. Campbell Smith; Ordinary Members of Council, Prof. H. L. Bowman, Dr. H. F. Harwood, Dr. W. F. P. McLintock, and Dr. J. Phemister. The following were proposed for submission to the Society: as Vice-President, Dr. W. F. P. McLintock; as Ordinary Members of Council, Mr. B. W. Anderson, Mr. C. F. Davidson, Dr. N. F. M. Henry, and Dr. W. R. Jones.

GENERAL MEETING

Held in the Apartments of the Geological Society, Burlington House, London, W., June 5, 1941, at 5 p.m.

Mr. Arthur Russell, President, in the Chair.

Twenty-five Members and five Visitors were present.

The elections of Messrs. C. Jukes, P. Zodac, and R. S. Collins as Ordinary Members of the Society were confirmed.

Dr. L. J. Spencer exhibited the third Roebling Medal which had been presented to him by the Mineralogical Society of America.

The President showed an exceptionally large polysynthetic crystal of cassiterite from Northern Nigeria.

Mr. G. H. Osborn exhibited a large mass of magnesium crystals that had been grown from sea-water by a secret process.

The following papers were then read:

1. Native gold and silver with other minerals from the Old West mine, Penhalonga, Southern Rhodesia: by Mr. A. M. Macgregor (read by the Editor) (vol. 26, p. 97).

2. The identity of 'eggonite' with sterrettite: by Mr. F. A. Bannister (vol. 26, p. 131).

3. The determination of the orientation of section planes of meteoritic irons: by Dr. M. H. Hey (vol. 26, p. 141).

4. Note on a contact-altered limestone from Chapel quarry, Fife: by Dr. A. G. MacGregor and Dr. J. Phemister.

5. Observations on the alteration products of stibnite: by Dr. W. R. Schoeller (vol. 26, p. 94).

6. On the graphical representation of some pyroxenes and amphiboles: by Dr. A. F. Hallimond.

7. Notes on some minerals either new or rare to Britain. Part 2: Orpiment: by Mr. Arthur Russell.

8. On a crystal of augelite from California: by Prof. M. A. Peacock and Mr. D. A. Moddle (vol. 26, p. 105).

EXCERPT MINUTES OF COUNCIL MEETING

Held in the Apartments of the Geological Society, Burlington House, London, W., November 6, 1941, *at* 2 *p.m.*

Mr. Arthur Russell, President, in the Chair.

Dr. Norman Bell Keevil and Mr. Gordon Frederick Andrews were provisionally elected Ordinary Members of the Society. The deaths of Mr. Maurice Blumenthal and Mr. Charles W. Mathews were reported.

Reports were received from the Treasurer and the Editor.

The General Secretary presented the draft annual report of the Council for 1940–1, which was approved.

Prof. H. L. Bowman and Dr. J. V. Harrison, the auditors for 1941, were reappointed for 1942.

GENERAL (ANNIVERSARY) MEETING

Held in the Apartments of the Geological Society, Burlington House, London, W., November 6, 1941, *at* 3.15 *p.m.*

Mr. Arthur Russell, President, in the Chair.

Thirty-four Members and four Visitors were present.

Mr. F. G. H. Blyth and Mr. C. E. N. Bromehead were appointed as scrutineers of the voting papers for the election of Officers and Council.

The elections of Dr. N. B. Keevil and Mr. G. F. Andrews were confirmed.

The General Secretary read the following:

ANNUAL REPORT OF THE COUNCIL FOR 1940–1

Membership.—According to the Society's records the total membership was on October 31, 262 against 264 on October 31, 1940, but for the reasons given below this figure may be subject to correction. Six new members have been elected. On the other hand, the Society has lost by death three Ordinary Members, Prof. C. Gilbert Cullis, Charles W. Mathews, and Maurice Blumenthal; three Members have resigned, the name of one other has been removed from the List of Members on account of arrears in subscription, and one election has been declared void. On that date the Membership consisted of six Honorary Members and 256 Ordinary Members, 211 of the latter being Annual Subscribers, and 45 Life Members. Of the Ordinary Members of the Society 152 were resident in Great Britain, 50 in the Dominions and Colonies, 25 in the United States of America, and 29 in other countries. Of the 29 Ordinary Members just mentioned 16 (14 Annual Subscribers and 2 Life Members) were resident in enemy or enemy-occupied countries. All touch with them and with two Honorary Members resident in occupied countries has been lost.

Meetings.—The usual four ordinary meetings were held during the session 1940–1, at which 19 papers were read, and 6 exhibits shown, but owing to existing circumstances, the attendance was below normal. The total attendance at these meetings was 88 Members and 11 Visitors.

Publications.—In spite of considerable difficulties the regular quarterly issue of the *Mineralogical Magazine* has been maintained. Of the four numbers published during the year, three (172–174) contained 12 papers in 104 pages, with 3 plates, and 508 abstracts in 144 pages, as well as the Bye-Laws, List of Members, and Proceedings for 1940 in 36 pages. No. 171 contained the index to vol. 25 of the Magazine and vol. 7 of the abstracts in 120 pages.

Financial.—The accounts for the calendar year 1940, published in March last, showed an excess of Assets (exclusive of the stock of the *Mineralogical Magazine*, certain periodicals, and the securities allocated to the Composition Fees Account) over Liabilities of £1409. 1*s.* 6*d.* The value of the securities standing in the name of the Custodian Trustee on December 31, 1940, was, General Reserve £1212. 8*s.* 0*d.*, Composition Fees Account £1083. 7*s.* 10*d.*

The outlook at the close of 1940 indicated clearly that strict economy would be necessary during 1941, and with this end in view, the Council then decided, as a precautionary measure, to limit the expenditure on the *Mineralogical Magazine* during 1941 to a maximum of £400.

The cash at Bankers, in the Post Office Savings Bank, and in hand on January 1, 1941, amounted to £157. 3*s*. 11*d*. against £321. 15*s*. 7*d*. at the beginning of 1940. A further heavy fall in the receipts from the Society's publishers for sales of the *Mineralogical Magazine* was anticipated, as was a considerable decline in the receipts from Annual Subscriptions.

The receipts from the publishers for sales amounted to £122. 4*s*. 2*d*. against an estimate of about £100. The corresponding figures for these receipts were £248. 10*s*. 4*d*. and £178. 11*s*. 10*d*. in 1939 and 1940 respectively. As regards Annual Subscriptions, it was estimated that of the total sum receivable for 1941, £178. 10*s*. 0*d*. would have been received by the close of the year, and about £7. 7*s*. 0*d*. as arrears. The total sum receivable from the 213 Annual Subscribers registered in the Society's books on January 1, 1941, was, for 1941, £223. 13*s*. 0*d*., and as arrears, £26. 13*s*. 7*d*., in all £250. 6*s*. 7*d*. Of this sum, however, £24. 11*s*. 7*d*. was due from 14 Annual Subscribers resident in enemy or enemy-occupied countries, and its receipt during the year could not be expected, while a further sum of £8. 8*s*. 0*d*. was due from Annual Subscribers resident in countries from which the transmission of money was expected to be difficult, if not impossible.

By October 31, £190. 19*s*. 10*d*. had been received in respect of 1941 subscriptions and £4. 4*s*. 0*d*. as arrears, in all £195. 3*s*. 10*d*., and the estimated figure had been exceeded by £11. 8*s*. 10*d*.

One Annual Subscriber compounded early in the year, and his Composition Fee has been invested.

In May the Society received through the Royal Society the sum of £100. 0*s*. 0*d*. from the Rockefeller Foundation Grant, in aid of its publications. This quite unexpected donation much eased the financial situation, and the Council desires to record in this report its sincere appreciation of the gift. The Council also desires to thank the Editor for his donation towards the cost of illustrations.

On October 31 the cash available for current purposes amounted to £341. 6*s*. 8*d*. Interest on Investments and other receipts will, it is anticipated, bring in about £41, while the expenditure during the remainder of the year is estimated at about £166. On this basis the cash available at the close of the year should be approximately £216.

General.—Since the beginning of 1941 the Society's Archives and the greater part of the stock of the *Mineralogical Magazine* have been removed from London and deposited elsewhere. These removals and other necessary air-raid precautions have entailed an expenditure of £10. 14*s*. 8*d*. Some difficulties have been experienced owing to the loss by enemy action of correspondence and remittances, but it is hoped that the arrangements that have now been made will minimize possible future losses and obviate the inconvenience caused thereby to Members resident abroad.

On the proposal of Dr. G. F. H. Smith, seconded by Dr. N. F. M. Henry, the adoption of the annual report was carried unanimously.

A vote of thanks to the Geological Society for the use of its rooms, proposed by Prof. H. H. Read, seconded by Mr. F. A. Bannister, was carried with acclamation.

The scrutineers reported that 18 ballot papers had been received and that the following list as nominated by the Council had been approved.

President. Mr. Arthur Russell, M.B.E.

Vice-Presidents. Prof. H. H. Read, D.Sc., F.R.S.; Dr. W. F. P. McLintock, D.Sc., F.R.S.E., F.G.S.

Treasurer. F. N. Ashcroft, M.A., F.G.S., F.C.S.

General Secretary. Dr. G. F. Claringbull, B.Sc., Ph.D., F.G.S.

Foreign Secretary. Sir Thomas H. Holland, K.C.S.I., K.C.I.E., D.Sc., LL.D., F.R.S.

Editor of the Journal. Dr. L. J. Spencer, C.B.E., M.A., Sc.D., F.R.S.

Ordinary Members of Council

F. A. Bannister, M.A.
Dr. S. R. Nockolds, B.Sc., Ph.D., F.G.S.
Prof. Harold Simpson, M.A., D.Sc.
S. I. Tomkeieff, M.Sc., F.G.S.
E. H. Beard, B.Sc.
Dr. A. J. Bull, M.Sc., Ph.D., F.G.S.
Dr. L. Hawkes, D.Sc., F.G.S.
Miss J. M. Sweet, B.Sc.
B. W. Anderson, B.Sc., F.C.S.
C. F. Davidson, B.Sc., F.R.S.E., F.G.S.
Dr. N. F. M. Henry, M.A., B.Sc., Ph.D.
Prof. W. R. Jones, D.Sc., M.I.M.M., F.G.S.

A vote of thanks to the retiring Vice-President and Ordinary Members of Council was proposed by Dr. A. J. Bull, seconded by Mr. F. H. Stewart, and carried.

Dr. R. C. Evans and Mr. H. S. Peiser exhibited and explained a structure factor calculating machine for use in X-ray crystal analysis.

The following papers were then read:

1. Barium-felspars (celsian and paracelsian) from Wales: by Dr. L. J. Spencer.

2. Tricalcium disilicate (rankinite), a new mineral from Scawt Hill, Co. Antrim: by Prof. C. E. Tilley (vol. 26, p. 190).

3. On the origin of the name 'quartz': by Mr. S. I. Tomkeieff (vol. 26, p. 172).

4. Lamellar structure in orthopyroxenes: by Dr. N. F. M. Henry (vol. 26, p. 179).

5. The orientation of Widmanstetter figures in a random section: by Mr. Sidney Melmore (vol. 26, p. 167).

The following papers were taken as read:

6. An anorthite-epidote-garnet-hornfels from Namaqualand, South Africa: by Mr. C. B. Coetzee (communicated by Prof. F. Walker) (vol. 26, p. 134).

7. A nomogram for the law of direction-cosines: by Mr. S. I. Tomkeieff.

8. A note on the Schroeder van der Kolk method: by Dr. R. C. Evans and Dr. N. F. M. Henry.

ABSTRACT OF RECEIPTS AND PAYMENTS

Receipts	£ s. d.	£ s. d.
		GENERAL PUR-
By Balances brought in from 1940—		
1. At Bankers on Current Account	48 14 3	
2. In Post Office Savings Bank	106 13 10	
3. In Office	1 15 10	
		157 3 11
Entrance Fees		5 5 0
Annual Subscriptions—		
1. Current Year	195 3 10	
2. Arrears	4 4 0	
3. Advance	12 14 9	
		212 2 7
Sale of Publications—		
1. By Publishers, April 1, 1940–March 31, 1941. Sales at subscription rate £162 10*s.* 0*d.* and other sales £19 10*s.* 0*d.*, less trade discount and commission £47 2*s.* 6*d.* and distribution charges £12 13*s.* 4*d.*	122 4 2	
2. By Custodian of Stock, 1941, £17 13*s.* 4*d.* less distribution charges £1 1*s.* 1*d.* and cost of back numbers purchased £0 8*s.* 4*d.*	16 3 11	
		138 8 1
Advertisement Fees £17 7*s.* 1*d.* less commission £3 9*s.* 5*d.*		13 17 8
Interest on Investments including Income Tax recovered—		
1. £693 3½% War Loan, 1952 and after, Inscribed Stock	24 5 2	
2. £105 4% Consolidated Loan, 1957, Inscribed Stock	4 4 0	
3. £100 4% Funding Loan, 1960–90, Inscribed Stock	4 0 0	
4. £201 Metropolitan Water Board 3% 'B' Stock, Inscribed	6 0 6	
5. £8910*s.*0*d.*3% War Loan, 1955–59, Inscribed Stock	2 13 8	
		41 3 4
Deposit Interest—		
1. Bankers	0 2 9	
2. Post Office Savings Bank	5 7 4	
		5 10 1
Donations—		
1. Rockefeller Foundation for publication purposes, through the Royal Society	100 0 0	
2. L. J. Spencer for illustrations	6 11 0	
		106 11 0
Small Receipts		0 1 1
Transfers from other Accounts—		
From Composition Fees Account, being Interest on Investments		36 16 9
		£716 19 6

SOCIETY

FOR THE YEAR ENDING DECEMBER 31, 1941

POSES ACCOUNT

Payments	£	s.	d.	£	s.	d.
To Printing and distributing the Mineralogical Magazine Nos. 172–175 inclusive (Oxford University Press)						
1. Printing	317	16	6			
2. Illustrations	21	6	6			
3. Authors' Separate Copies	21	19	1			
4. Distribution Charges	14	0	0			
				375	2	1
Printing and distributing Notices of Meetings and other annual miscellaneous printing				18	6	2
Miscellaneous Printing, &c. (not annual)—						
1. Secretary's notices	0	9	3			
2. Treasurer's notices	1	18	6			
3. Bye-laws and List of Members	2	4	0			
				4	11	9
Expenses at Meetings—						
1. Operator of Lantern	2	2	0			
2. Porter	1	0	0			
3. Tea	3	18	6			
				7	0	0
Custodian Trustee's charges				0	11	8
Care of Stock of Publications, J. Mugford, Annual Fee				1	1	0
Editor's Honorarium				50	0	0
Stationery				2	16	5
Postage and telegrams—						
1. Hon. Secretary	1	8	0			
2. Editor (not charged)	0	0	0			
3. Hon. Treasurer	6	7	5			
				7	15	5
Emergency Expenditure—						
Packing and transport of the balance of the Society's Records and of the stock of the Mineralogical Magazine, &c.				10	14	8
Bank Charges and other small items				0	10	4
Balances December 31, 1941—						
1. At Bankers on Current Account	53	2	4			
2. In Post Office Savings Bank	185	7	4			
3. In Office	0	0	4			
				238	10	0
				£716	19	6

Examined and compared with Vouchers and found correct.

H. L. BOWMAN
J. V. HARRISON } Auditors.

January 14, 1942. F. N. ASHCROFT, Hon. Treasurer.

BALANCE

DECEMBER

LIABILITIES	£	s.	d.
To Annual Subscriptions received in advance—			
Received in 1941 for 1942	12	14	9
Sundry Creditors—	0	0	0
Excess of Assets over Liabilities	1503	18	8
	£1516	13	5

COMPOSITION FEES ACCOUNT

RECEIPTS	£	s.	d.	£	s.	d.
Composition Fees received as per last account . .	1207	10	0			
Composition Fee received during year . . .	15	15	0			
				1223	5	0
Interest on Investments including Income Tax recovered—						
1. £992 3½% War Loan, 1952 and after, Inscribed Stock	34	14	4			
2. £26 3% Conversion Loan, 1948–53, Inscribed Stock	0	15	6			
3. £26 14*s.* 0*d.* Metropolitan Water Board 3% 'B' Stock, Inscribed	0	16	0			
4. £25 18*s.* 0*d.* 3% War Loan, 1955–59, Inscribed Stock	0	10	11			
				36	16	9
				£1260	1	9

SHEET

31, 1941

Assets	£	s.	d.	£	s.	d.
By Balances—						
1. At Bankers on Current Account	53	2	4			
2. In Post Office Savings Bank	185	7	4			
3. In Office	0	0	4			
				238	10	0
Sundry Debtors—						
Publishers (Oxford University Press):						
(*a*) For Sale of Publications, April 1–December 31, 1941, estimated at	20	0	0			
(*b*) For Advertisement Fees, April 1–December 31, 1941, estimated at	8	0	0			
				28	0	0
Investments at Brokers' Valuation—						
1. £693 3½% War Loan, 1952 and after, Inscribed Stock at 105%	727	13	0			
2. £105 4% Consolidated Loan, 1957, Inscribed Stock at 111½% ex div.	117	1	6			
3. £100 4% Funding Loan, 1960–90, Inscribed Stock at 114½%	114	10	0			
4. £201 Metropolitan Water Board 3% 'B' Stock, Inscribed, at 97%	194	19	5			
5. £89 10*s.* 0*d.* 3% War Loan, 1955–59, Inscribed Stock at 101¼%	90	12	4			
				1244	16	3
Annual Subscriptions in Arrear (£43 11*s.* 9*d.* including £25 12*s.* 7*d.* due from enemy and enemy-occupied countries) estimated to realize				3	5	2
Entrance Fees in Arrear				2	2	0
				£1516	13	5

Note.—The value of the periodicals retained after the disposal of the Library, that of the unsold Stock of Publications, and the Securities allocated to the Composition Fees Account are not included in the above assets.

January 14, 1942. F. N. ASHCROFT, Hon. Treasurer.

YEAR ENDING DECEMBER 31, 1941

Payments	£	s.	d.	£	s.	d.
Investments as per last account—						
1. £992 3½% War Loan, 1952 and after, Inscribed Stock, valued by Brokers at £1041 12*s.* 0*d.* (105%) at cost	1144	5	6			
2. £26 3% Conversion Loan, 1948–53, Inscribed Stock, valued by Brokers at £26 13*s.* 0*d.* (102½%) at cost	26	9	6			
3. £26 14*s.* 0*d.* Metropolitan Water Board 3% 'B' Stock, Inscribed, valued by Brokers at £25 18*s.* 0*d.* (97%) at cost	26	5	0			
4. £10 10*s.* 0*d.* 3% War Loan, 1955–59, Inscribed Stock, valued by Brokers at £10 12*s.* 7*d.* (101¼%) at cost	10	10	0			
				1207	10	0
Investment made during the year, being Composition Fee received. Purchase of £15 8*s.* 0*d.* 3% War Loan, 1955–59, Inscribed Stock, valued by Brokers at £15 11*s.* 10*d.* (101¼%) at cost				15	15	0
Income transferred to General Purposes Account				36	16	9
				£1260	1	9

Examined and compared with Vouchers and found correct.

H. L. BOWMAN
J. V. HARRISON } Auditors.

January 14, 1942. F. N. ASHCROFT, Hon. Treasurer.

PROCEEDINGS

OF THE

MINERALOGICAL SOCIETY

(1942)

EXCERPT MINUTES OF COUNCIL MEETING

Held in the Apartments of the Geological Society, Burlington House, London, W., January 22, 1942, at 2 p.m.

Mr. Arthur Russell, President, in the Chair.

r. Edward Wilfred Nuffield, Lord Rayleigh, Dr. Robert Wigglesworth, and Dorothy Ethel Wisden were proposed and provisionally elected Ordinary ıbers of the Society. The names of certain members in arrear with their ıal subscriptions were read, and that of Mr. I. G. Jardine was removed from List of Members.

the absence of the Treasurer, the audited accounts and balance-sheet for were presented by the General Secretary, and were approved. It was agreed mit the expenditure on the *Magazine* for 1942 to £400. A report was received ı the Editor and the position arising out of the rationing of paper by the er Controller was discussed.

GENERAL MEETING

Held in the Apartments of the Geological Society, Burlington House, London, W., January 22, 1942, at 3.15 p.m.

Mr. Arthur Russell, President, in the Chair.

wenty-five Members and four Visitors were present.

ıe elections of Mr. E. W. Nuffield, Lord Rayleigh, Dr. R. Wigglesworth, and D. E. Wisden as Ordinary Members of the Society were confirmed.

ıe following papers were read:

Merwinite as an artificial mineral: by Dr. James Phemister (vol. 26, p. 225).

Cummingtonite and gedrite from near Strathy, north Sutherland: by Dr. Collins (vol. 26, p. 254).

A suite of volcanic rocks from south-west Uganda containing kalsilite (a rph of $KAlSiO_4$): by Prof. Arthur Holmes (read by Dr. James Phemister) 2, p. 197).

Kalsilite, a polymorph of $KAlSiO_4$, from Mafuru, Uganda: by Mr. F. A. er, with micro-chemical analyses by Dr. M. H. Hey (vol. 26, p. 218).

EXCERPT MINUTES OF COUNCIL MEETING

Held in the Apartments of the Geological Society, Burlington House, London, W., March 19, 1942, *at* 3.30 *p.m.*

Mr. Arthur Russell, President, in the Chair.

The death of Sir William Henry Bragg, Ordinary Member, was reported.

Reports were received from the Treasurer and the Editor. The Treasurer gav notice that he wished to resign from that office at the next anniversary meeting To meet the paper shortage it was agreed that more matter be printed per pag of the *Magazine*. The number of reprints of each paper, except the lists of ne mineral names, was limited to 25.

GENERAL MEETING

Held in the Apartments of the Geological Society, Burlington House, London, W., March 19, 1942, *at* 5 *p.m.*

Mr. Arthur Russell, President, in the Chair.

Twenty Members and five Visitors were present.

A lecture entitled 'Extra reflections on X-ray photographs of crystals' w delivered by Dr. Kathleen Lonsdale.

The following papers were read:

1. Preliminary observations on the distribution of trace elements in the roc of the Skaergaard intrusion, Greenland: by Dr. L. R. Wager and Dr. R. Mitchell (vol. 26, p. 283).

2. An analysis of the movements of shadow-edges on the refractometer in t case of biaxial gemstones: by Mr. E. J. Burbage and Mr. B. W. Anderson (vol. 2 p. 246).

EXCERPT MINUTES OF COUNCIL MEETING

Held in the Apartments of the Geological Society, Burlington House, London, W., June 4, 1942, *at* 3.30 *p.m.*

Mr. Arthur Russell, President, in the Chair.

Dr. Clifford Frondel was provisionally elected an Ordinary Member of Society.

The death of Professor H. L. Bowman was reported.

Reports were received from the Treasurer and the Editor. Without alter the size of page and of type, but by increasing the area of the letterpress fr $6{\cdot}6\times4$ to $7{\cdot}3\times4{\cdot}5$ inches and by using thin leading in place of thick leading increase of 35% in the matter per page of the *Magazine* has been obtained.

The following dates for meetings in 1943 were approved, subject to the ag ment of the Geological Society: Thursdays, January 21, March 18, June November 4. [The first two of these dates had afterwards to be changed January 28 and March 25.]

The list of Officers and Council for 1942-3 was considered. The following are to retire: President, Mr. Arthur Russell; Treasurer, Mr. F. N. Ashcroft; Ordinary Members of Council, Mr. F. A. Bannister, Dr. S. R. Nockolds, Prof. Herbert Stanley Simpson, and Mr. S. I. Tomkeieff. The following were proposed for submission to the Society: as President, Mr. F. N. Ashcroft; as Treasurer, Dr. A. J. Bull; as Ordinary Members of Council, Mr. C. E. N. Bromehead, Dr. J. V. Harrison, Mr. G. E. Howling, Dr. W. Campbell Smith, and Mr. R. C. Spiller.

GENERAL MEETING

Held in the Apartments of the Geological Society, Burlington House, London, W., June 4, 1942, at 5.30 p.m.

Mr. Arthur Russell, President, in the Chair.

Twenty-two Members and five Visitors were present.

The election of Dr. Clifford Frondel as an Ordinary Member of the Society was confirmed.

The following exhibits were briefly explained:

A direct-reading balance of the Walker type for the determination of specific gravities of rocks and minerals (Dr. A. F. Hallimond).

A centrifuge tube for the quantitative separation of mineral grains (Mineral Department, British Museum).

Polyhalite from a depth of 4500 feet in a boring at Aislaby, Sleights, near Whitby (Prof. C. E. Tilley).

A copy of J. J. Scheuchzer's 'Itinera Alpina', 1708, showing a figure of some twisted quartz ('Schwindelsteine') (Mr. F. N. Ashcroft).

The following papers were then read:

Chemical data on a silica-poor argillaceous hornfels and its constituent minerals: by Dr. F. H. Stewart (read by Prof. C. E. Tilley) (vol. 26, p. 260).

Brammallite (sodium-illite), a new mineral from Llandebie, South Wales: by Mr. F. A. Bannister (vol. 26, p. 304).

The mica of certain coal-measure shales in South Wales: by Dr. G. Nagelschmidt and Mr. D. Hicks (vol. 26, p. 297).

EXCERPT MINUTES OF COUNCIL MEETING

Held in the Apartments of the Geological Society, Burlington House, London, W., November 5, 1942, at 2 p.m.

Mr. Arthur Russell, President, in the Chair.

Messrs. Carl Moore Cook, Herbert Steffen Peiser, George Ernest Steel, and Raymond Collinge Walsh were provisionally elected Ordinary Members of the Society.

The resignation of Mr. G. W. Gray was accepted, and the election of Dr. N. B. Vaux was declared void. The death of Prof. T. L. Walker, Honorary Member, was reported.

Reports were received from the Treasurer and the Editor. Two donations of £3 6s. 6d. each towards the cost of illustrations had been received.

The General Secretary presented the draft annual report of the Council for 1941–2, which was approved.

Mr. E. H. Beard and Dr. J. Phemister were appointed auditors for 1942.

It was found necessary to change the dates of the January and March meetings of the Society in 1943 to January 28 and March 25.

GENERAL (ANNIVERSARY) MEETING

Held in the Apartments of the Geological Society, Burlington House, London, W., November 5, 1942, *at* 3.15 *p.m.*

Mr. Arthur Russell, and afterwards Mr. F. N. Ashcroft, President, in the Chair.

Twenty-four Members and ten Visitors were present.

Dr. A. F. Hallimond and Dr. R. S. Collins were appointed as scrutineers of the voting papers for the election of Officers and Council.

The elections of Messrs. C. M. Cook, H. S. Peiser, G. E. Steel, and R. C. Walsh were confirmed.

The General Secretary read the following:

ANNUAL REPORT OF THE COUNCIL FOR 1941–2

Membership.—Including 16 Ordinary Members and 2 Honorary Members resident in enemy or enemy-occupied countries, the total membership on October 31 was 265 against 262 on October 31, 1941. Seven new members have been elected during the year. The Society has lost by death one Honorary Member, Thomas Leonard Walker, Emeritus Professor of Mineralogy in the University of Toronto, and two Ordinary Members, Prof. H. L. Bowman and Sir William H. Bragg. There have been no resignations, but the name of one member has been removed from the List of Members on account of arrears in subscription. The Membership on October 31 consisted of 5 Honorary Members and 260 Ordinary Members of whom 44 were Life Members and the remainder Annual Subscribers. Of the 260 Ordinary Members 153 were resident in Great Britain, 52 in the Dominions and Colonies, 26 in the United States of America, and 29 in other countries.

Meetings.—At the four ordinary meetings held during the session 1941–2, 14 papers were read, 3 were taken as read, a lecture was delivered, and 5 exhibits were shown. There was a considerable increase in attendance as against the previous session. The total attendance was 105 members and 18 visitors, representing an average attendance of 30 persons.

Publications.—The quarterly issue of the *Mineralogical Magazine* has been maintained despite the severe limitation of paper supplies. Three (nos. 175–177) of the usual four numbers issued during the year have contained the Proceedings for 1941 in 12 pages, 13 papers in 128 pages, with 5 plates and 36 text-figures, and 393 abstracts in 108 pages. In order to economize in space, and so offset the effect of the reduced paper supplies available, the Council decided to introduce a change with the issue of the June number. By increasing the area of print per page and reducing the leading it has been possible without changing the type or the size of page to increase the number of words per page by 35%. This alteration, together with a small special allowance of paper, has enabled the Editor to include 83% of the normal amount of matter.

Financial.—The accounts for the calendar year 1941, published in March last, showed an excess of assets (exclusive of the stock of the *Mineralogical Magazine*, certain periodicals, and the securities allocated to the Composition Fees Account) over liabilities of £1503. 18*s.* 8*d.* against £1409. 1*s.* 6*d.* at the close of 1940. The value of the securities standing in the name of the Custodian Trustee on December 31, 1941, was, General Reserve £1244. 16*s.* 3*d.*, Composition Fees Account £1120. 7*s.* 5*d.*

It was clear before the beginning of 1942 that, as in 1941, strict economy would continue

to be necessary, and the limit placed on the expenditure on the *Mineralogical Magazine* for 1941 was renewed.

The cash at Bankers, in the Post Office Savings Bank, and in hand on January 1, 1942, amounted to £238. 10*s*. 0*d*. against £157. 3*s*. 11*d*. at the beginning of 1941. At that time a further fall in the receipts from the Society's publishers for sales of the *Mineralogical Magazine* was anticipated, but the actual receipts for 1942, £174. 4*s*. 2*d*., were much in excess of the expected figure, and exceeded the receipts for 1941 by £52. 0*s*. 0*d*. A decline in the receipts from Annual Subscriptions was also expected, but, apart from the increase in the amount of 'frozen' subscriptions (those due from Members resident in enemy and enemy-occupied countries), present figures show that the decline will not be as great as was expected. The amount receivable from the 213 Annual Subscribers on the Society's books on January 1, 1942, was, for 1942, £223. 13*s*. 0*d*. and as arrears £43. 11*s*. 9*d*., in all £267. 4*s*. 9*d*. Of this sum £16. 16*s*. 0*d*. for 1942 and £25. 12*s*. 7*d*. due as arrears were 'frozen'. After the deduction of these sums, the amount receivable was, for 1942, £206. 17*s*. 0*d*. and as arrears £17. 19*s*. 2*d*. Of the amount payable in respect of 1942 subscriptions £12. 14*s*. 9*d*. had been received in advance before the beginning of the year.

By October 31, £185. 17*s*. 0*d*. (including twelve payments in advance) had been received in respect of 1942 subscriptions and £6. 8*s*. 2*d*. as arrears, as against £190. 19*s*. 10*d*. and £4. 4*s*. 0*d*. respectively by that date in 1941.

The cash available for current purposes on October 31 amounted to £458. 3*s*. 7*d*. as against £341. 6*s*. 6*d*. on that date in 1941, but the figures are not strictly comparable, owing to the delay in the issue of the September number of the *Mineralogical Magazine*, the bill for which had not by then been paid. The outgoings for the remainder of the year, provided it is possible to settle the account for the December number of the *Magazine* before the close of the year, are estimated at about £264, and the receipts therefor at about £48. On this basis the cash available at the close of the year should be about £242.

General.—The arrangements referred to in the Annual Report for 1940-1 relative to the remittance of subscriptions, &c., from Members resident overseas have proved satisfactory, and no losses of remittances through enemy action have occurred.

The Society is to be congratulated on its continued prosperity.

On the proposal of Dr. A. F. Hallimond, seconded by Mr. G. H. Osborn, the adoption of the Annual Report was carried unanimously.

A vote of thanks to the Geological Society for the use of its rooms was proposed by Mr. E. H. Beard, seconded by Dr. N. F. M. Henry, and carried with acclamation.

The scrutineers reported that 22 ballot papers had been received and that the following list as nominated by the Council had been approved.

President. Mr. F. N. Ashcroft, M.A., F.G.S., F.C.S.

Vice-Presidents. Prof. H. H. Read, D.Sc., F.R.S.; Dr. W. P. F. McLintock, D.Sc., F.R.S.E. F.G.S.

Treasurer. Dr. A. J. Bull, M.Sc., Ph.D., F.G.S.

General Secretary. Dr. G. F. Claringbull, B.Sc., Ph.D., F.G.S.

Foreign Secretary. Sir Thomas H. Holland, K.C.S.I., K.C.I.E., D.Sc., LL.D., F.R.S.

Editor of the Journal. Dr. L. J. Spencer, C.B.E., M.A., Sc.D., F.R.S.

Ordinary Members of Council

E. H. Beard, B.Sc.
Dr. L. Hawkes, D.Sc., F.G.S.
Miss J. M. Sweet, B.Sc.
E. W. Anderson, B.Sc., F.C.S.
C. F. Davidson, D.Sc., F.R.S.E., F.G.S.
Dr. N. F. M. Henry, M.A., B.Sc., Ph.D.
Prof. W. R. Jones, D.Sc., M.I.M.M., F.G.S.
C. E. N. Bromehead, B.A., F.G.S.
Dr. J. V. Harrison, D.Sc., F.R.S.E., F.G.S.
G. E. Howling, B.Sc.
Dr. W. Campbell Smith, M.C., T.D., M.A., Sc.D., F.G.S.
R. C. Spiller, M.A.

A vote of thanks to the retiring President and Ordinary Members of Council

[*continued on p. lxiv*

ABSTRACT OF RECEIPTS AND PAYMENTS

Receipts	£ s. d.	£ s. d. (General Purposes)
By Balances brought in from 1941—		
1. At Bankers on Current Account	53 2 4	
2. In Post Office Savings Bank	185 7 4	
3. In Office	0 0 4	
		238 10 0
Entrance Fees		8 8 0
Annual Subscriptions—		
1. Current Year	177 6 3	
2. Arrears	6 8 2	
3. Advance	7 8 0	
		191 2 5
Sale of Publications—		
1. By Publishers, April 1, 1941–March 31, 1942. Sales at subscription rate £219. 0*s.* 0*d.* and other sales £28. 4*s.* 0*d.*, less trade discount and commission £64. 3*s.* 0*d.* and distribution charges £8. 16*s.* 10*d.*	174 4 2	
2. By Custodian of Stock, 1942, £60. 2*s.* 6*d.* less distribution and other charges £3. 13*s.* 0*d.* and cost of back numbers purchased £20. 12*s.* 2*d.*	35 17 4	
		210 1 6
Advertisement Fees £8. 18*s.* 3*d.* less commission £1. 15*s.* 8*d.*		7 2 7
Interest on Investments including Income Tax recovered—		
1. £693 3½% War Loan, 1952 and after, Inscribed Stock	24 5 2	
2. £105 4% Consolidated Loan, 1957, Inscribed Stock	4 4 0	
3. £100 4% Funding Loan, 1960–90, Inscribed Stock	4 0 0	
4. £201 Metropolitan Water Board 3% 'B' Stock, Inscribed	6 0 6	
5. £89. 10*s.* 0*d.* 3% War Loan, 1955–59, Inscribed Stock	2 13 8	
		41 3 4
Deposit Interest—		
1. Bankers	0 0 9	
2. Post Office Savings Bank	8 7 8	
		8 8 5
Donations towards cost of Illustrations		7 13 0
Small Receipts		0 1 8
Transfers from other Accounts—		
From Composition Fees Account, being Interest on Investments		37 1 4
		£749 12 3

SOCIETY

FOR THE YEAR ENDING DECEMBER 31, 1942

POSES ACCOUNT

Payments	£ s. d.	£ s. d.
To Printing and distributing the Mineralogical Magazine Nos. 176–179 inclusive (Oxford University Press)		
1. Printing	290 3 0	
2. Illustrations	38 4 6	
3. Authors' Separate Copies (Nos. 176, 177 and 178)	18 10 1	
4. Distribution Charges	12 12 3	
5. Payment in advance in respect of Authors' Separate Copies from No. 179	5 8 6	
		364 18 4
Printing and distributing Notices of Meetings and other annual Miscellaneous printing		21 1 6
Miscellaneous Printing, &c. (not annual)—		
Treasurer's Notices		1 10 6
Expenses at Meetings—		
1. Operator of Lantern	2 2 0	
2. Porter	1 0 0	
3. Tea	2 19 0	
		6 1 0
Custodian Trustee's charges		0 11 8
Care of Stock of Publications, J. Mugford, Annual Fee		1 1 0
Editor's Honorarium		50 0 0
Postage and telegrams—		
1. Hon. Secretary	1 6 0	
2. Editor (not charged)	0 0 0	
3. Hon. Treasurer	5 12 8	
		6 18 8
Conversion of Foreign Exchange; Exchange Control Charges, losses on exchange, &c. (debit balance)		1 3 8
Bank Charges and other small items		0 8 4
Balances December 31, 1942—		
1. At Bankers		
(a) On Current Account	26 4 2	
(b) On Deposit Account	35 0 0	
2. In Post Office Savings Bank	233 7 8	
3. In Office	1 5 9	
		295 17 7
		£749 12 3

Examined and compared with Vouchers and found correct.

E. H. BEARD
JAMES PHEMISTER } Auditors.

January 20, 1943. A. J. BULL, Hon. Treasurer.

Note:—A payment in advance of £70. 5*s*. 0*d*. was made to cover the cost of No. 179, the Authors' Separate Copies therefrom and those from No. 178. The account for No. 179 and that for the Authors' Separate Copies from No. 178 have since been received and the figures have been adjusted accordingly.

BALANCE

Liabilities	December £ s. d.
To Annual Subscriptions received in advance—	
Received in 1942 for 1943	7 8 0
Sundry Creditors	0 0 0
Excess of Assets over Liabilities	£1685 3 2
	£1692 11 2

COMPOSITION FEES ACCOUNT

Receipts	£ s. d.	£ s. d.
Composition Fees received as per last account . .		1223 5 0
Interest on Investments including Income Tax recovered—		
1. £992 3½% War Loan, 1952 and after, Inscribed Stock	34 14 4	
2. £26 3% Conversion Loan, 1948–53, Inscribed Stock	0 15 6	
3. £26. 14*s.* 0*d.* Metropolitan Water Board 3% 'B' Stock, Inscribed	0 16 0	
4. £25. 18*s.* 0*d.* 3% War Loan 1955–59, Inscribed Stock	0 15 6	
		37 1 4
		£1260 6 4

SHEET

31, 1942

Assets	£ s. d.	£ s. d.
By Balances—		
1. At Bankers		
(a) On Current Account	26 4 2	
(b) On Deposit Account	35 0 0	
2. In Post Office Savings Bank	233 7 8	
3. In Office	1 5 9	
		295 17 7
Sundry Debtors—		
1. Publishers (Oxford University Press)		
(a) For Sale of Publications, April 1–December 31, 1942	129 17 11	
(b) For Advertisement Fees, April 1–December 31, 1942	9 5 6	
2. Other sales of Publications	1 0 0	
		140 3 5
Investments at Brokers' Valuation—		
1. £693 3½% War Loan, 1952 and after, Inscribed Stock at 105%	727 13 0	
2. £105 4% Consolidated Loan, 1957, Inscribed Stock at 110¼% ex div.	116 0 6	
3. £100 4% Funding Loan, 1960–90, Inscribed Stock at 113¾%	113 15 0	
4. £201 Metropolitan Water Board 3% 'B' Stock, Inscribed, at 97%	194 19 5	
5. £89. 10*s.* 0*d.* 3% War Loan, 1955–59, Inscribed Stock at 102¼%	91 10 3	
		1243 18 2
Annual Subscriptions in Arrear (£69. 14*s.* 7*d.* including £42. 8*s.* 7*d.* due from enemy and enemy-occupied countries) estimated to realize		10 10 0
Entrance Fees in Arrear		2 2 0
		£1692 11 2

Note:—The value of the periodicals retained after the disposal of the Library, that of the unsold Stock of Publications, and the Securities allocated to the Composition Fees Account are not included in the above Assets.

January 20, 1943. A. J. BULL, Hon. Treasurer.

YEAR ENDING DECEMBER 31, 1942

Payments	£ s. d.	£ s. d.
Investments as per last account—		
1. £992 3½% War Loan, 1952 and after, Inscribed Stock, valued by Brokers at £1041. 12*s.* 0*d.* (105%) at cost	1144 5 6	
2. £26 3% Conversion Loan, 1948–53, Inscribed Stock, valued by Brokers at £26. 18*s.* 3*d.* (103½%) at cost	26 9 6	
3. £26. 14*s.* 0*d.* Metropolitan Water Board 3% 'B' Stock, Inscribed, valued by Brokers at £25. 18*s.* 0*d.* (97%) at cost	26 5 0	
4. £25. 18*s.* 0*d.* 3% War Loan, 1955–59, Inscribed Stock, valued by Brokers at £26. 9*s.* 8*d.* (102¼%) at cost	26 5 0	
		1223 5 0
Income transferred to General Purposes Account		37 1 4
		£1260 6 4

Examined and compared with Vouchers and found correct.

E. H. BEARD
JAMES PHEMISTER } Auditors.

January 20, 1943. A. J. BULL, Hon. Treasurer.

was proposed by Dr. W. F. P. McLintock, seconded by Dr. G. F. Herbert Sm and carried. Mr. Arthur Russell, vacating the chair in favour of his succes Mr. F. N. Ashcroft, paid tribute to the latter's untiring service for the Societ

Mr. Arthur Russell exhibited a banded replacement of fluorite in limest from Co. Durham.

The following papers were then read (no. 5 being taken as read):

1. The X-ray powder pattern of α-cristobalite: by Dr. A. H. Jay (c municated by Mr. F. A. Bannister).

2. Minyulite (hydrous K-Al fluophosphate) from South Australia: by Dr. L Spencer, Mr. F. A. Bannister, Dr. M. H. Hey, and Miss Hilda Bennett.

3. A scheme for the complete analysis of complex mixtures of English flu spars: by Mr. G. H. Osborn.

4. The chemical composition of leucoxene in Cainozoic bauxite from Boola Victoria: by Dr. A. B. Edwards (communicated by Dr. F. L. Stillwell and r by the Editor) (vol. 26, p. 273).

5. The lattice parameters of α-alumina and chromic oxide: by Dr. A. H. and Dr. W. T. Wilde (communicated by Mr. F. A. Bannister).